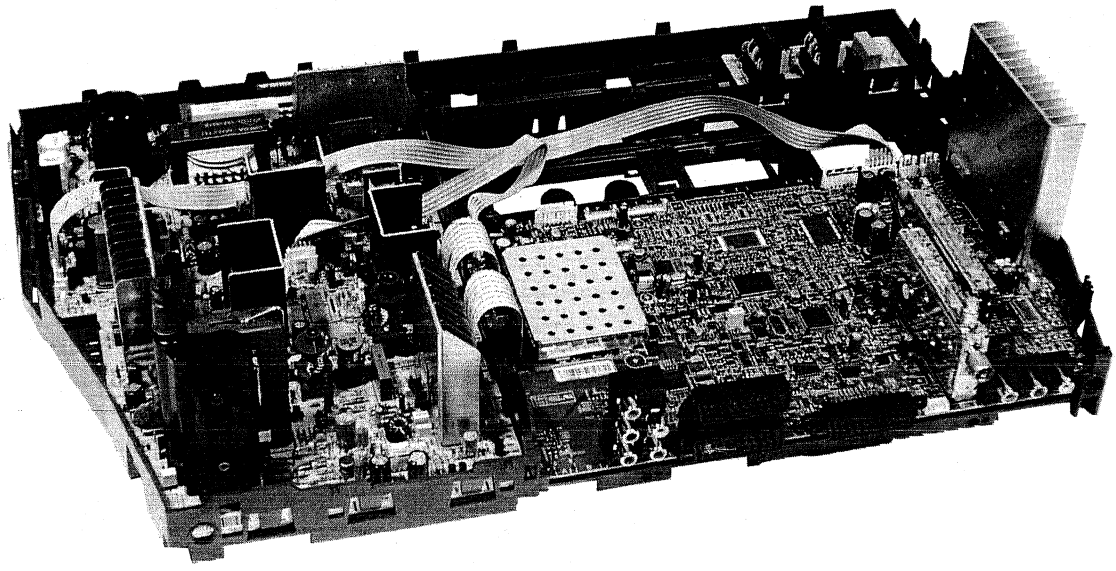
THOMSON

TV

SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

ITC222



WARNING : *Before servicing this chassis please read the safety recommendations.*
ATTENTION : *Avant toute intervention sur ce châssis, lire les recommandations de sécurité.*
ACHTUNG : *Vor jedem Eingriff auf diesem Chassis, die Sicherheitsvorschriften lesen.*
ATTENZIONE : *Prima di intervenire sullo chassis, leggere le norme di sicurezza.*
IMPORTANTE : *Antes de cualquier intervención, leer las recomendaciones de seguridad.*

Code : 357 388 00 - 1203 / 6M - ITC222 - Print. Rosseels Printing: 01 53 01 11 11

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Do not disconnect modules when they are energized!
Repairs on power supply section are to be carried out only with isolating transformer.

Ne pas retirer les modules lorsqu' ils sont sous tension. N'effectuer les travaux de maintenance sur la partie reliée au secteur (Switch Mode) qu'au travers d'un transformateur d'isolement.

Module nicht bei eingeschaltetem Gerät entfernen!
Servicearbeiten am Netzteil nur unter Verwendung eines Regeltrenntrafos durchführen.

Non scollegare le piastre quando sono alimentate!
Per le riparazioni sulla sezione alimentatore, utilizzare un trasformatore isolatore.

No desconectar los módulos cuando están activados. Las reparaciones en la sección de alimentación de energía deben ser ejecutadas solamente con un transformador de separación.

⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be garanteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraine la non-conformité de l'appareil. Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) nicht durch Original - Ersatzteile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione dei componenti di sicurezza (evidenziati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformitá dell'apparecchio. In tal caso è "esclusa la responsabilità " del costruttore.

La sustitución de elementos de seguridad (marcados con el simbolo ⚠) por componentes no homologados segun la norma CEI 65, provoca la no conformidad del aparato. En ese caso, el fabricante cesa de ser responsable.

MEASUREMENT CONDITIONS - CONDITIONS DE MESURES - MESSBEDINGUNGEN CONDIZIONI DI MISURA - CONDICIONES DE MEDIDAS

RECEIVER :
On UHF,input level : 1 mV, bar test pattern :
- PAL, I standard, 100% white.

Via the scart socket, input level : 1 Vpp, bar test pattern :

Colour, contrast and brightness at mid-position, sound at minimum.
Programme selected : PR 01.

DC voltages measured between the point and earth using a digital voltmeter.

RECEPTEUR :
En UHF, niveau d'entrée 1 mV mire de barres
- SECAM, Norm L, Blanc 100%.

Par la prise Péritélévision, niveau d'entrée 1 Vcc, mire de barres .

Couleur, contraste, lumière à mi-course, son minimum.
Programme affecté PR 01.

Tensions continues relevées par rapport à la masse avec un voltmètre numérique.

EMPFÄNGER :
Bei UHF Eingangspegel 1 mV, Farbbalken :
- PAL, Norm G, Weiss 100%.

Über die Scartbuchse : Eingangspegel 1 Vss, Farbbalken :

Farbe, Kontrast, Helligkeit in der Mitte des Bereichs, Ton auf Minimum.
Zugeordnetes Programm PR 01.

Gleichspannungen mit einem digitalen Voltmeter zur Masse gemessen.

RICEVITORE :
In UHF, livello d'entrata 1 mV, monoscopio barre :
- PAL, norma G. bianco 100%.

Via SCART, livello d'entrata 1 Vpp, monoscopio barre :

Colore, Contrasto, Luminositá media, Suono minimo.
Programma selezionato PR 01.

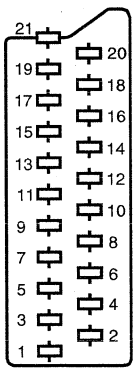
Tensioni continue rilevate rispetto alla massa con un voltmetro digitale.

RECEPTOR :
En UHF, nivel de entrada 1 mV, mira de barras :
- PAL, norma G, blanco 100%.

Por la toma Peritelevision, nivel de entrada 1 Vpp mira de barra.

Color, Contraste, luz a mitad de carrera, Sonido minimo.
Programa afectado PR 01.

Tensiones continuas marcadas en relacion a la masa con un voltimetro digital.



NOTE : (MAIN) *... etc. identifies each* pcb module.

NOTE : (MAIN) *... etc. repères des platines constituant l'appareil.*

HINWEIS : (MAIN) *... usw. Kennzeichnung der Platinen, aus denen das Gerät zusammengesetzt ist.*

NOTA : (MAIN) *... ecc. sigla delle piastre dell' apparecchio.*

NOTA : (MAIN) *... etc. marcas de las placas que constituyen el aparato.*

		ENGLISH	FRANÇAIS	DEUTSCH	ITALIANO	ESPAÑOL
1	⊖	AUDIO "R"	AUDIO "D"	AUDIO "R"	AUDIO "D"	AUDIO "D"
2	⊕	AUDIO "R"	AUDIO "D"	AUDIO "R"	AUDIO "D"	AUDIO "D"
3	⊖	AUDIO "L"	AUDIO "G"	AUDIO "L"	AUDIO "S"	AUDIO "I"
4	⊥	AUDIO	AUDIO	AUDIO	AUDIO	AUDIO
5	⊥	"BLUE"	"BLEU"	"BLAU"	"BLU"	"AZUL"
6	⊕	AUDIO "L" MONO	AUDIO "G" MONO	AUDIO "L" MONO	AUDIO "S" MONO	AUDIO "I" MONO
7	⊕	"BLUE"	"BLEU"	"BLAU"	BLU	AZUL
8	⊕	SLOW SWITCH	COMMUT. LENTE	AV UMSCHALTUNG	"COMMUTAZIONE LENTA"	"CONMUTACION LENTA"
9	⊥	"GREEN"	"VERT"	"GRÜN"	"VERDE"	"VERDE"
10	⊕ ⊖	AV LINK	AV LINK	AV LINK	AV LINK	AV LINK
11	⊕	"GREEN"	"VERT"	"GRÜN"	"VERDE"	"VERDE"
12	NC					
13	⊥	"RED"	"ROUGE"	"ROT"	"ROSSO"	"ROJA"
14	NC					
15	⊕	"RED"	"ROUGE"	"ROT"	"ROSSO"	"ROJA"
16	⊕	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	"COMMUTAZIONE RAPIDA"	"CONMUTACION RAPIDA"
17	⊥	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
18	⊥	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	"COMMUTAZIONE RAPIDA"	"CONMUTACION RAPIDA"
19	⊖	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
20	⊕	VIDEO OR "SYNC"	VIDEO SYNCHRO	VIDEO ODER SYNCHRO	VIDEO O SINCRO	VIDEO O SINCRO
21	⊖	PLUG SCREEN BOX	BLINDAGE PRISE	ABSCHIRMUNG DES STECKERS	INVOLUCRO METALLICO DELLA PRESA	BLINDAJE DEL ENCHUFE

⊕ : INPUT - ENTRÉE - EINGANG - ENTRATA - ENTRADA • ⊖ : OUTPUT - SORTIE - AUSGANG - USCITA - SALIDA • ⊥ : EARTH - MASSE - MASSE - MASSA - MASA

INFORMATION - INFORMATIONS - INFORMATIONEN
INFORMAZIONE - INFORMACIONES

(EN) The **ITC222** chassis is equipped with two main boards :
- Power/Scan Board :PSB - Designation: **EP222 **GW**... and Small Signal Board: SSB - Designation: **ES222M5**...

Chassis group table
1 - The electronic chassis configuration (modules) and schematic diagram page numbers.
2 - The modules configuration.

(FR) Les chassis **ITC222** sont constitués de deux platines principales:
- Platine Balayage/Alimentation: PSB-Désignation: **EP222 **GW**... et Platine petits signaux: SSB-Désignation: **ES222M5**..

Le tableau ci-dessous regroupe :
1 - L'environnement électronique de chaque chassis (modules) et le numéro de page où il est décrit.
2 - La désignation des modules.

(DE) Das Chassis **ITC222** besteht im wesentlichen aus zwei Hauptleiterplatten:
- Netzteil/Ablenk-Platine: PSB - Bezeichnung: **EP222 **GW** ... ; Signal-Platine: SSB - Beszeichnung: **ES222M5**...

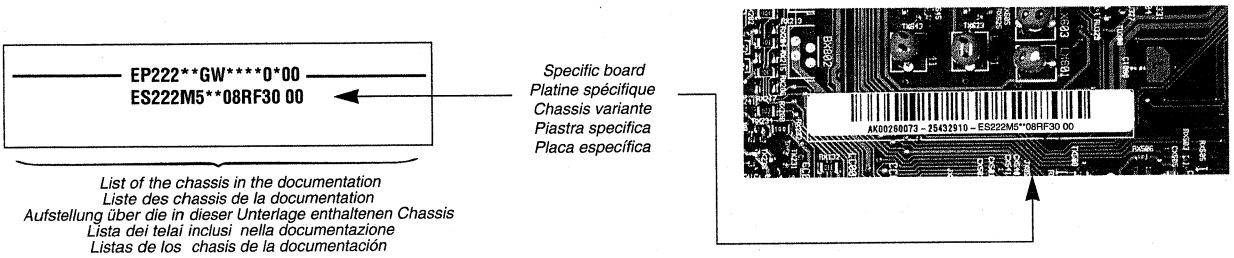
Die folgende Tabelle der Chassisgruppen stellt dar:
1 - Die Baugruppen der einzelnen Chassisvarianten und die Seitenzahlen des dazugehörigen Schaltbildes.
2 - Die Modulbestückung der Chassisvarianten.

(IT) Il telaio **ITC222** è formato da due piastre principali :
- Piastra Deflessione/Alimentazione : PSB - Descrizione: **EP222 **GW** ... ; Piastra Piccoli Segnali : SSB - Descrizione: **ES222M5** ...

La tabella in basso indica:
1 - La configurazione elettronica del telaio (moduli) ei numeri di pagina del relativo schema.
2 - La configurazione dei moduli.

(ES) El chasis **ITC222** está compuesto por dos placas principales :
- Placa Alimentación / Barridos (PSB), denominada : **EP222 **GW** ... ; y la placa de pequeñas señales (SSB), denominada : **ES222M5** ...
- En la tabla siguiente se pueden ver:

1 – La configuración electrónica de cada chasis (módulos) y el número de página donde está el esquema.
2 – La denominación de los módulos.



DESCRIPTION	BLK/ WIR. DIAGR.	CONNECT- SAFETY	ADJUST. MENTS	POWER / SCAN BOARD			SMALL SIGNAL BOARD							CRT	DYNAMIC FOCUS	FCB KDB
				POWER (PP)	SCAN (DP)	PSB PCB	POWER (SPP)	REMOTE (RP)	HF TUNER	FRONT END (FE)	VIDEO (VP)	AUDIO (AP)	SSB PCB			
EP222**GW****0*00	5 - 8	9	10-24	25-26	27-28	29-34										
ES222 M5**08RF30 00	5 - 8	9	10-24				35-36	37-40	41-42	43-48	49-52	56-62	63-69	53-55	70-72	75-77
EP222**IW****0* 00	5 - 8	9	10-24	25-26	27-28	29-34										
ES222 M5**08RF30 00	5 - 8	9	10-24				35-36	37-40	41-42	43-48	49-52	56-62	63-69	53-55	70-72	75-77

VHF / UHF Tuner Part (for Information only) : p. 73 - 74
Integrated Circuits and Transistors outline : p. 78

INFORMATION - INFORMATIONS - INFORMATIONEN - INFORMAZIONE - INFORMACIONES

EN **OUT OF PRODUCTION MODE :**
To set TV into "**out of production mode**" (letter **P** at the screen):
- Press the **VOL -** button on the TV keyboard until the letter "P" disappears.

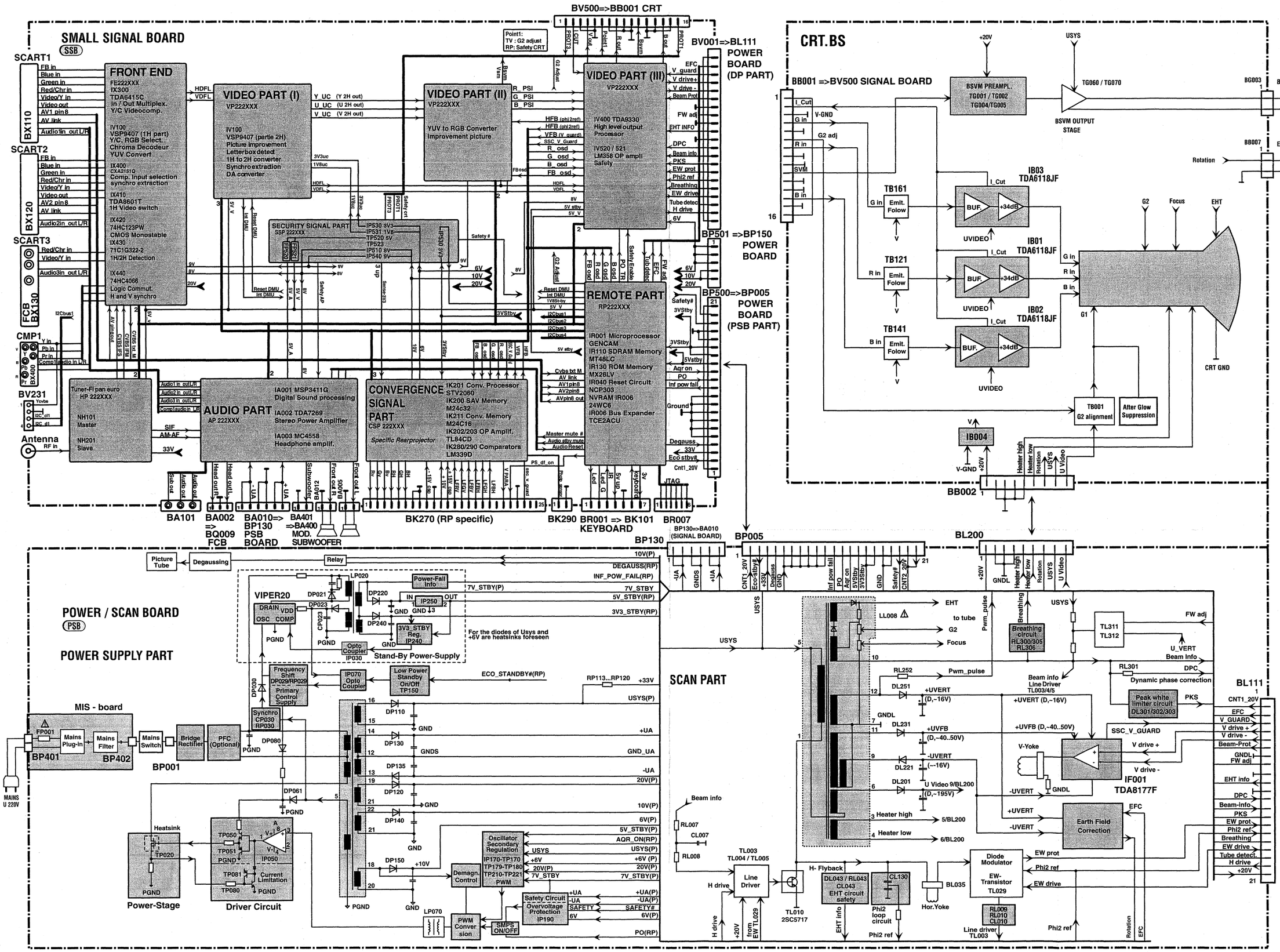
FR **SORTIE DE MODE PRODUCTION**
Pour sortir le téléviseur du mode production (lettre P à l'écran):
- Appuyer sur la touche **VOL-** du clavier du téléviseur jusqu'a la disparition de la lettre "**P**" .

DE **VERLASSEN DES PRODUKTIONSMODE:**
"**Lautstärke -**" am Nahbedienfeld drücken bis der Cursor am linken Anschlag ist und dann noch weitere ca. 10 s halten bis das eingeblendete "**P**" verschwindet.

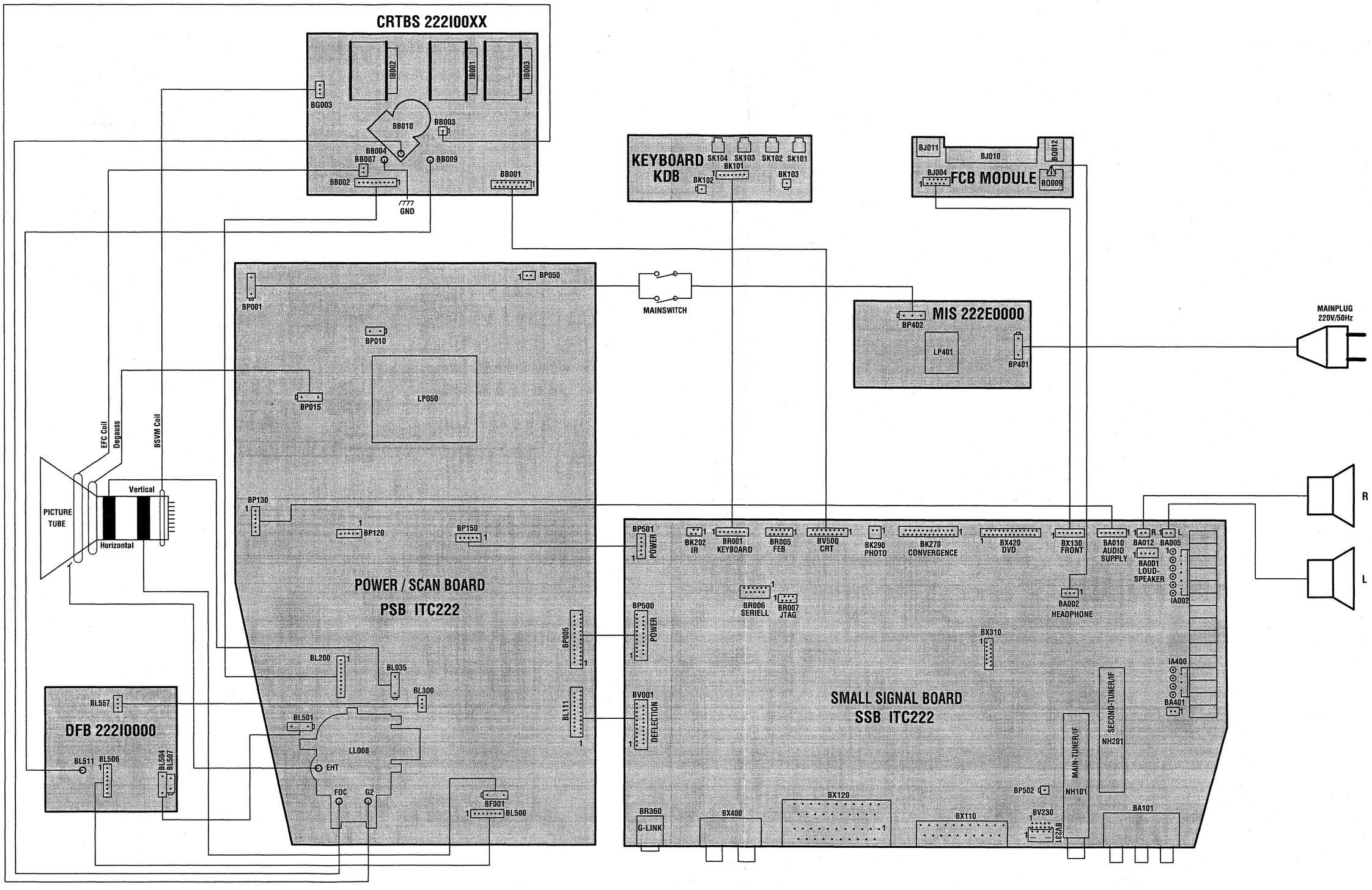
IT **USCITA DA PRODUCTION MODE:**
Per uscire dalla condizione " **Production mode**" (lettera P presente suulo schermo)
- Premere il tasto-volume sulla tastiera comandi del TV fino a che la lettera "**P**" scompare.

ES **SALIDA DEL MODO PRODUCCION.**
Para salir del '**modo producción**', (aparece una letra **P** en la pantalla):
- Mantener pulsada la tecla "**Volumen -**" del teclado hasta que la letra "**P**" desaparezca.

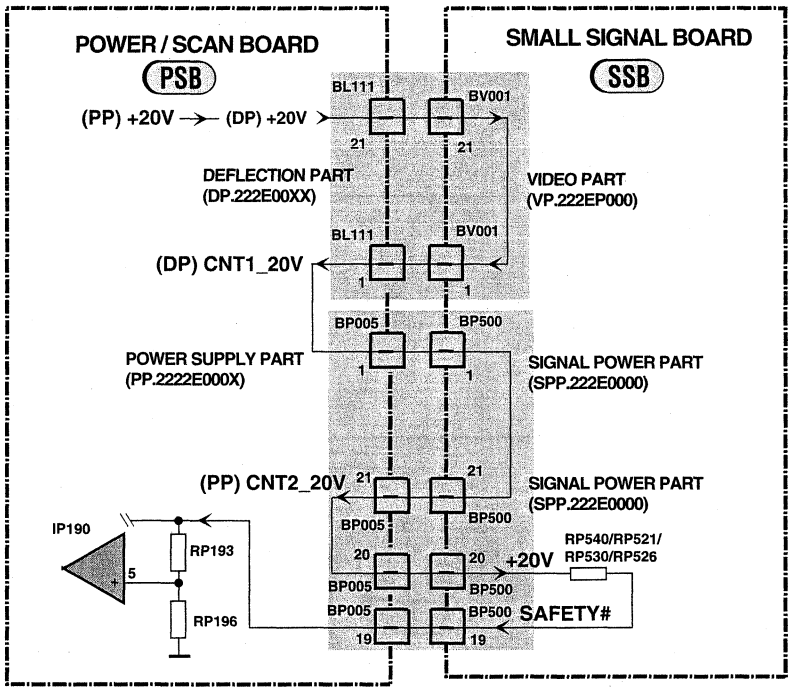
BLOCK DIAGRAM - SCHEMA SYNOPTIQUE - BLOCKSCHALTBILD - SCHEMA A BLOCCHI - ESQUEMA DE BLOQUES



WIRING DIAGRAM - SCHEMA D'INTERCONNEXIONS - VERDRAHTUNGSPLAN - DIAGRAMMA DELLE INTERCONNESSIONI - ESQUEMA DE INTERCONEXIONES



CONNECTING SAFETY POWER BOARD / SIGNAL BOARD
SECURITE DE CONNEXION PLATINES PUISSANCE / PETITS SIGNAUX
VERBINDER ZWISCHEN NETZTEIL/ABLENK-PLATINE UND SIGNAL-PLATINE
COLLEGAMENTI DI SICUREZZA DELLA PIASTRA POTENZA/PIASTRA SEGNALI
CONEXIONES DE LA SEGURIDAD ENTRE LA PLACA ALIMENTACIÓN / SEÑAL



EN

The **20V** voltage which is fed in a loop **CNT1_20V => CNT2_20V** through the connectors going to the signal processing boarder in order to insure a good connection between both boards and to protect the **PSB** and the **SSB** boards :
CNT1_20V => protecting the cable connections BL111 / BV001
CNT2_20V => protecting the cable connections BP005 / BP500
If one of these voltage does not exist (20V comprise) the IP170 output will be 0 and the main SMPS will be bloked via TP210/TP161.

FR

Le cheminement de la tension **20V** par la platine petits signaux est effectué sous forme de boucle **CNT1_20V => CNT2_20V**
afin de protéger les platines **PSB** et **SSB** en cas de mauvaise connexion des nappes BR003 et BV003.
CNT1_20V => sécurité de la nappe BL111 / BV001
CNT2_20V => sécurité de la nappe BP005 / BP500.
Si l'une de ces tensions (20V inclu) n'est pas présente la sortie de IP170 passe à 0 entraînant le blocage de l'alimentation principale via TP210/TP161.

DE

Um die **PSB**- und die **SSB**-Platinen zu schützen und um eine sichere Betriebsspannungsversorgung dieser Platinen zu gewährleisten, ist die **+20V-Versorgungsschiene** (**CNT1_20V => CNT2_20V**) über die Verbinder BV001 und BR003 durchgeschleift.
CNT1_20V => Schutz über Flachbandkabel BL111 / BV001
CNT2_20V => Schutz über Flachbandkabel BP005 / BP500
Sollte eine dieser (Teil-) Spannungen (oder die +20V) fehlen, ist der Ausgang des IP170 Pin 7 auf L-Pegel und das Hauptnetzteil wird über TP210/TP161 abgeschaltet.

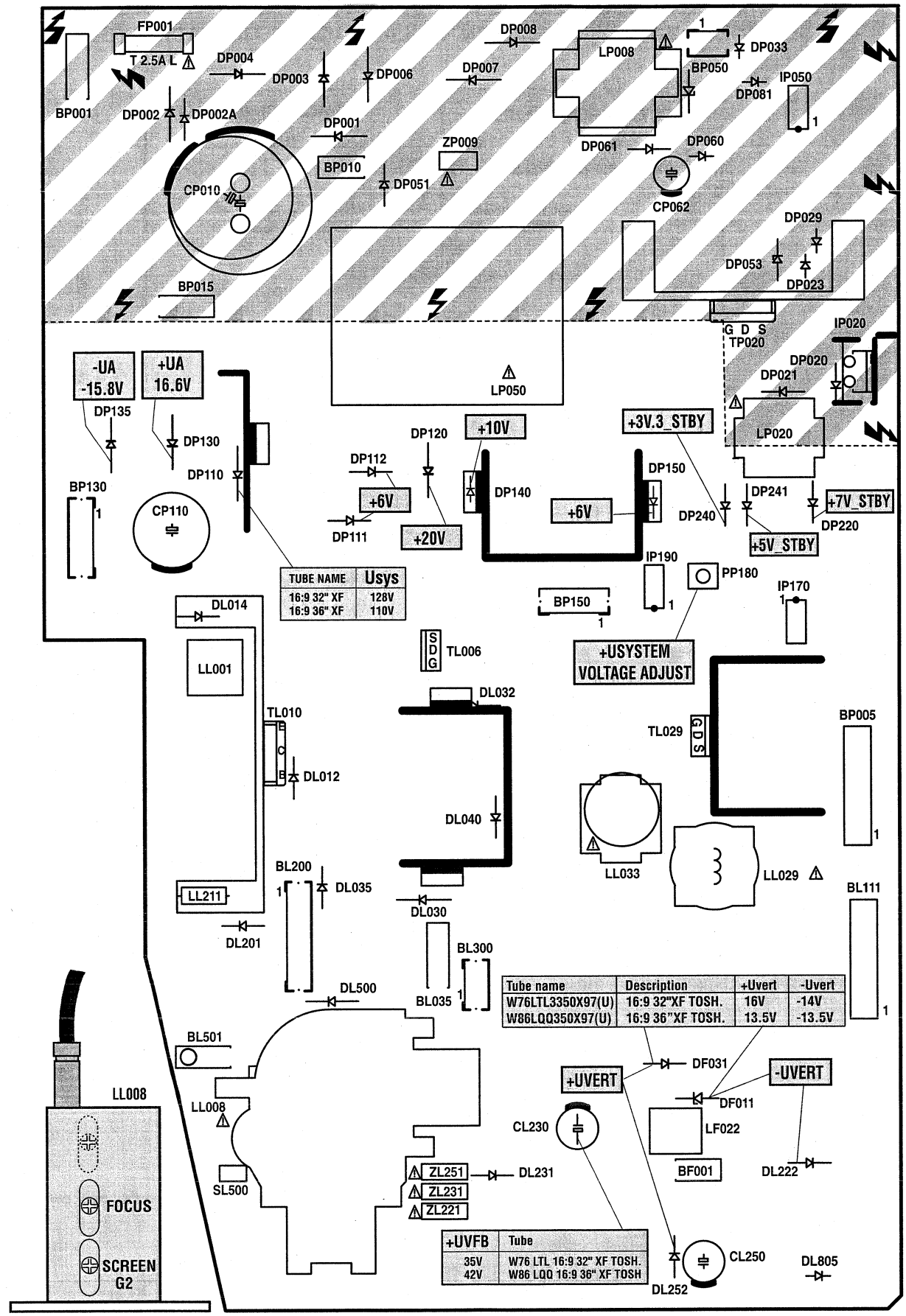
IT

L'alimentazione di **20V** alla piastra elaborazione segnali viene fornita dai connettori **CNT1_20V => CNT2_20V** in modo da assicurare une protezione delle piastre **PSB** e **SSB** nel caso che si manifesta se un cattivo collegamento.
CNT1_20V => protezione BL111 / BV001
CNT2_20V => protezione BP005 / BP500
Se una di queste tensioni non è presente (20V compresi) l'uscita di IP170 sarà messa a zero e l'alimentatore SMSP verrà bloccato via TP210/TP161.

ES

El recorrido de la tensión de **20V** por la placa SSB se efectúa en forma de bucle **CNT1_20V => CNT2_20V** con el fin de proteger las placas **PSB** y **SSB** en el caso de un fallo de los conectores
CNT1_20V => seguridad del mazo BL111 / BV001
CNT2_20V => seguridad del mazo BP005 / BP500
Si falta una de estas tensiones (20V incluida), la salida de IP170 será 0 y la fuente principal (SMPS) se bloqueará por TP210/TP161.

LOCATION OF CONTROLS - EMPLACEMENT DES REGLAGES - SERVICE LAGEPLAN - POSIZIONE REGULATORI DI SERVIZIO - SITUACIÓN DE LOS AJUSTES



Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello châssis collegata alla rete.
Parte del chasis conectada a la red

Use isolating mains transformer -
Utiliser un transformateur isolateur du secteur -
Trenntrafo verwenden -
Utilizar un transformador aislador de red -
Utilizzare un transformatore per isolarvi dalla rete

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONE - AJUSTES

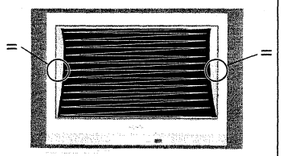
U Sys	PP180	Standard TV - Settings : ☼+◑+◑=50% TV to AV1 : Black test pattern	V= DP 110

Tube name	Description	Usys jumper	RP900 Usys divid.	Usys
W76LTL350X97(U)	16/9 32"XF	JP911	26K1	128V
W86LQQ350X97(U)	16/9 36"XFT	JP911	7K15	110V

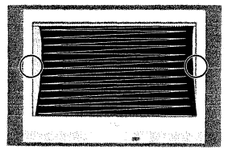
RASTER SHIFT CORRECTION - CENTRAGE DE BALAYAGE HORIZONTAL - BILDLAGE-EINSTELLUNG
CENTRATURA DI SCANSIONE ORIZZONTALE - RASTER SHIFT CORRECTION - CORRECCIÓN DEL CENTRADO HORIZONTAL

SERVICE MODE

PL551
DYNAMIC FOCUS BOARD
DFB
SCREEN



correct



no correct

- Choose "Geometry" menu in the Service Mode and change H-Amplitude until under scan is reached.
- Choose "Video" menu and active "G2 alignment"
- If the raster is not visible increase G2 voltage (SCREEN potentiometer) slightly until raster becomes visible.
- Center the raster between tube border (equal distance on both sides) with PL551 on Dynamic Focus Board .
- Aiign G2 and Geometry.

- Aller dans le Mode service/menu "Géométrie" et agir sur H-Amp pour obtenir un sous-balayage.
- Aller ensuite dans "Vidéo" et activer "G2 alignment".
  Les retours lignes doivent être visibles. Sinon augmenter légèrement la tension G2 voltage (potentiomètre SCREEN) jusqu'à ce qu'ils soient visibles.
- Régler PL551(platine DFB) pour centrer le balayage sur le tube (sans faire de repli sur la trace).
- Régler G2 et la Géométrie .

- Wählen Sie im Service-Mode das Menü „GEOMETRY" und reduzieren Sie die Horizontal-Amplitude bis das Bild horizontal unterschrieben wird (schwarze Ränder links und rechts).
- Wählen Sie im Service-Mode das Menü „VIDEO" und aktivieren Sie den G2-Abgleich.
- Sollte das Gitter nicht sichtbar sein, erhöhen Sie die G2-Spannung (Einsteller SCREEN) langsam bis das Gitter sichtbar wird.
- Stellen Sie mit dem Poti PL551 auf dem Dynamic Focus Board die Horizontal-Bildlage so ein, dass sich das Gitter in der Mitte des Bildschirm befindet und die schwarzen Bildränder an den Seiten gleich breit sind.
- Gleichen Sie die G2-Spannung und die Bildgeometrie neu ab.

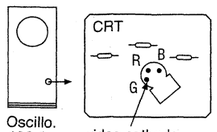
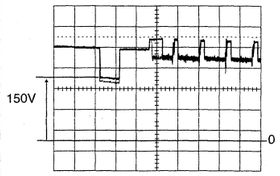
- Selezionare il menu di "Geometria"in service mode e regolare la funzione H-AMPfino ad ottenere una sotto scansione.
- Selezionare il menu "Video" e agire sulla funzione "G2 Alignement".
- Se il raster non è visibile incrementare la tensione G2 (pot.Screen) lentamente fino a rendere visibile il raster.
- Centrare il raster tra i bordi del tubo (uguale sistanza tra i bordi) con PL551 posizionato sulla piastra Fuoco Dinamico.
- Regolare G2 e Geometria.

- Seleccionar "Geometría" en el menú del Modo Servicio y reducir H-Amplitude hasta ver franjas negras
- Seleccionar el menú "Video" y seleccionar "G2 alignment"
- Si el barrido no es visible, aumentar la tensión de la G2 (potenciómetro SCREEN) lentamente hasta que sea visible.
- Centrar el barrido (igual distancia en ambos laterales) con PL551 en la placa Dynamic Focus.
- Ajustar la G2 y la Geometría.

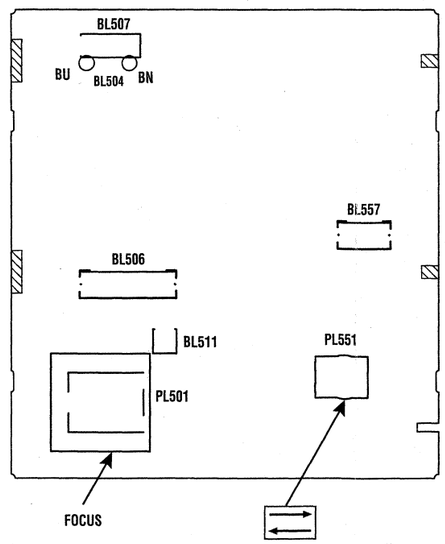
U G2 METHOD 1 SERVICE MODE

U G2 SERVICE MODE	SERVICE MODE G2 potentiometer : SCREEN	-Select and enable the "G2 Alignment" item in VIDEO menu of the Service Mode : the displayed will change to a full black OSD screen. The following adjustment is best carried in semi-darkness: - Adjust the **SCREEN** potentiometer (LL008) so that the retrace lines are just visible. - Now carefully adjust the **SCREEN** potentiometer until the retrace lines just become invisible. - Press any RCU key to leave the G2 alignment. Note: If the G2 value is set too low, the chassis will display error code 36 (tube does not get warm in time). - Sélectionner et valider le réglage "G2 Alignment" dans le menu Vidéo de Service Mode: l'écran devient totalement noir. En obscurité: - Régler le potentiomètre "**SCREEN**" (LL008) pour apercevoir le retour des lignes. - Régler ensuite le potentiomètre "**SCREEN**" pour rendre juste invisible les lignes de retour. - Appuyer sur une des touches de la télécommande utilisateur pour sortir du mode G2 Alignment. Note : En cas de réglage G2 trop faible le chassis passe en code panne 36 (absence de l'information tube chaud. - Wählen Sie im Service-Mode im Menü VIDEO die Funktion "G2 Alignment" an: der Bildschirm wird schwarz. Die folgenden Einstellungen sollten in einem abgedunkelten Raum vorgenommen werden. - Stellen Sie den Einsteller **SCREEN** (am DST LL008) so ein, dass Rücklaufstreifen sichtbar werden. - Stellen Sie den Einsteller SCREEN so ein, dass die Rücklaufstreifen gerade unsichtbar werden. - Drücken Sie irgendeine Taste auf der Fernbedienung um den G2-Abgleich zu verlassen. Achtung: Wenn die Schirmgitter- (G2-) Einstellung zu niedrig ist, kann der Fehlercode 36 (Bildrohr nicht rechtzeitig aufgeheizt) angezeigt werden. Selezionare e abilitare"G2 Alignment" interno al menu VIDEO del Service Mode: Verrà visualizzato uno schermo nero. In condizione con ambiente scuro. Regolare il potenziometro **SCREEN** (LL08) per rendere visibili le ritracce sullo schermo Regolare il potenziometro **SCREEN** per eliminare le ritracce sullo schermo Premere un tasto del tecomando per abbandonare G2 alignment. NOTA: se la regolazione della tensione G2 è tropppo bassa il telaio visualizzerà il codice 36 (il tubo non raggiunge la temperatura nel tempo richiesto) - Seleccionar y validar la línea del "ajuste G2" en el menú VIDEO del Modo Servicio : La pantalla se pondrá oscura y el OSD pasará a color negro. Cuando esté oscura: - Ajustar el potenciómetro **SCREEN** (LL008) hasta hacer visibles las líneas de retrazado. - Ajustar el potenciómetro **SCREEN** justo, hasta hacer invisibles las líneas de retrazado. - Pulsar cualquier tecla del telemando para salir del ajuste de G2. Nota: Si el valor del ajuste de G2 es muy bajo, el chasis puede indicar el código de error 36 (TRC no se calienta en el tiempo establecido)

U G2 METHOD 2 MEASURMENT METHOD

U G2	G2 potentiometer : SCREEN Focus-Block	Standard TV - Settings : ☼+◑+◑ = 50% TV to AV1 : Black test pattern	 CRT-highest cathode CRT-highest cathode Adjust VG2 CRT: V= 150V 
FOCUS	FOCUS	Standard TV - Settings : ☼+◑+◑=50%	TV to AV1 Test pattern Sharp picture
Focus adjustment for extra flat tube (XF)			1 - Turn PL501 fully clockwise. 2 - Using FOCUS adjust the focus of the horizontal line in the middle of the screen have the best sharpness. 3 - Turn PL501 that the vertical lines at the edge of the screen have the best sharpness. 4 - Repeat if necessary these adjustments to optimise the sharpness.
Réglage focus pour les tubes extra plats (XF)	FOCUS DFB PL501		1 - Tourner PL501 à fond dans le sens des aiguilles d'une montre. 2 - Régler le potentiomètre "FOCUS" pour obtenir la ligne horizontale en milieu d'écran la plus fine possible. 3 - Régler PL501 pour obtenir la ligne verticale au bord la plus fine possible. 4 - Répéter si nécessaire ces réglages pour optimiser la finesse.
Fokus-einstellung bei extra flat-bildröhren (XF)			1- Stellen Sie PL501im Uhrzeigersinn auf Anschlag. 2- Gleichen Sie mit dem FOUS-Einsteller die mittlere horizontale Linie auf maximale Schärfe ab. 3- Gleichen Sie mit PL501 die Schärfe der vertikalen Linien in den Ecken des Bildschirms auf Maximum ab. 4- Falls notwendig wiederholen Sie den Abgleich, bis die optimale Bildschärfe erreicht wurde.
Regolazione fuoco per tubi extra flat (XF)			1 Ruotare PL501 completamente in senso orario. 2 Tramite la regolazione FUOCO regolare le linee orrinzontali al centro dello schermo fino ad avere la migliore definizione. 3 Regolare PL501 fino a che le linee verticali ai bordi dello schermo siano perfettamente definite. 4 Ripetere se necessario più volte queste regolazioni per ottimizzare la definizione.
Ajuste del foco para t.r.c. extraplano (XF)			1 - Girar PL501 totalmente hacia la izquierda 2 - Utilizando el ajuste FOCUS, enfocar las líneas horizontales del centro de la pantalla 3 - Girar PL501 hasta que las líneas verticales de las bordes de la pantalla tengan la mejor definición. 4 - Repetir estos ajustes hasta conseguir optimizar la definición.

DYNAMIC FOCUS MODULE - MODULE FOCUS DYNAMIQUE - DYNAMIKFOKUS BAUSTEIN - MODULO FUOCO DINAMICO - MÓDULO FOCO DINÁMICO



SERVICE MODE EN

MODE SERVICE FR

SERVICE - MODE DE

SERVICE - MODE IT

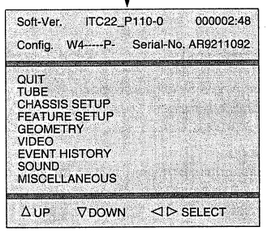
MODO SERVICIO ES

I - ENTER/EXIT SERVICE MODE - ENTREE/SORTIE DU MODE SERVICE - EIN-AUSTIEG SERVICE MODE - ACCESSO/USCITA ALLA/DALLA FUNZIONE - ENTRADA/SALIDA MODO SERVICIO

1 ACCESSING SERVICE MODE

TV Control Panel Access

- Switch the TV into "**Standby**" mode by pressing the Standby button on the RCU.
  Wait till the TV goes into the standby.
- Press the **VOL-** button and then the **PR-** button on the TV keyboard.
  Hold them down for more than 8 seconds.
- After the normal switch on time, when the 8 seconds have elapsed, the main service menu appears on the screen.

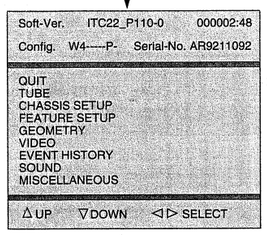


Note :
In service mode :
- Clear any wake-up/sleep/memo/EPG timers
- First installation Mode is overridden.
- Zoom and format are set to standard scanning
- Front Panel lock mode has to be cancelled.
- Pin 8 of the scart plug has to be ignored.
- AV- Link WSS detection and letterbox detection has to be disabled (autoformat).
- EPG and TELETEXT have to be disabled.
- All passwords have to disabled.
- On PTV set the Burn In Protection has to be disabled.

1 ACCES AU MODE SERVICE

Accès avec le clavier du téléviseur

- Mettre le téléviseur en position "**veille**" avec la télécommande utilisateur.
- Appuyer sur la touche **VOL-** puis sur la touche **PR-** du clavier du téléviseur.
  Maintenir enfoncées ces touches ensemble plus de 8 secondes.
- Après le temps normal de mise en fonctionnement et lorsque les 8 secondes sont écoulées, le menu principal du Mode Service apparaît.

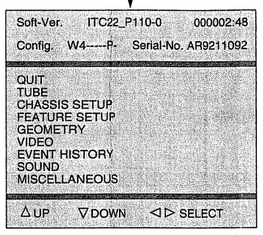


Note :
En mode service:
- La programmation des heures "reveil/matin", mémoire et EPG est annulée.
- Le premier mode d'installation est ignoré.
- Zoom et format sont initialisés au balayage standard.
- Le verrouillage du bloc de commandes du TV est effacé (réinitialisé).
- Pin 8 de la prise SCART ignorée.
- AV- Link , la détection WSS et la détection letterbox ne sont pas validées.
- Les fonctions EPG et Télétexte ne sont pas validées.
- Les mots de passe ne sont pas validés.
- Sur les modèles Rétroprojecteurs la fonction de protection aux brûlures de tube est dévalidée.

1 EINSTIEG IN DEN SERVICE MODE

Zugriff über die Tastatur des Fernsehgeräts

- Schalten Sie das Gerät mit der Fernbedienung in **Standby**.
- Drücken Sie die **VOL-** Taste und dann die **PR-**Taste am Nahbedienteil
  des Gerätes. Halten Sie beide Tasten für länger als 8 Sekunden gedrückt.
- Nach der normalen Einschaltzeit erscheint auf dem Bildschirm das Menü des Service-Modes.

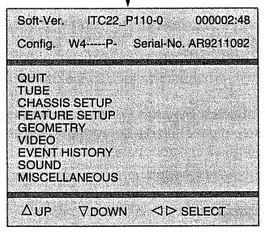


Anmerkung:
Im SERVICE MODE :
- werden alle Weck-, Schlummer-, Memo- und EPG-Timer gelöscht.
- Der Erstinstallations-Mode wird vom Service-Mode überlagert.
- Zoom und Bildformat werden auf Standardwerte gesetzt
- Die Bedienteilsperre wird aufgehoben
- wird die SCART - Schaltspannung nicht ausgewertet.
- AV-Link, WSS- und Letterbox-Detektion (Autoformat) sind abgeschaltet.
- sind Videotext und EPG abgeschaltet.
- werden alle Passworte gelöscht.
- Bei Rückprojektionsgeräten wird der Einbrennschutz außer Betrieb gesetzt

1 ACCESSO AL SERVICE MODE

tramite i comandi del televisore

- Posizionare il TV nel modo "**Standby**" usando il tasto standby del telecomando.Attendere che il TV si posizioni in standby.
- Premere prima il tasto **VOL-** e poi il tasto **PR-** sulla tastiera del TV Mantenere premuto idue tasti per più di 8 secondi.
- Dopo circa 8 secondi il TV si accenderà mostrando sullo schermo il menu service.

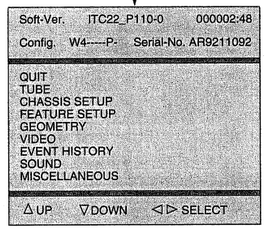


Nota :
Nel service mode:
- Cancella qualsiasi wake-up/sleep/EPG timers.
- Il primo modo di istallazione è ignorato
- Zoom e Format sono inizializzati alla scansione standard
- Il blocco pannello frontale è stato annullato
- Il piedino 8 della scart è ignorato.
- La rilevazione AV-Link WSS e rilevazione letterbox (formato) è statà disabilitata.
- EPG e TELEVIDEO sono stati disabilitati.
- Tutte le password sono state disabilitate
- Sui modelli PTV la protezione Burnt è stata disabilitata

1 ACCESO AL MODO SERVICIO

Acceso panel control TV

- Con el TV encendido, apagarlo con la tecla "**Standby**" del telemando. Asegurarse de que el aparato ha pasado a "Standby".
- Pulsar primero, la tecla VOL- y después PR- del teclado del TV. Mantenerlas pulsadas al mismo tiempo durante unos 8 segundos
- Después del arranque normal, cuando hayan pasado los 8 segundos, aparecerá el menú principal del Modo Servicio



Nota :
En modo servicio:
- Borrar despertador/función sleep/memorias/temporizadores EPG
- El modo primera instalación es ignorado.
- El zoom y el formato son inicializados a barrido estándar
- El bloqueo del teclado queda cancelado.
- La patilla 8 del SCART es ignorada
- La detecci6n de A V-Link, WSS y "modo buzón" (autoformato) se desactiva.
- EPG y TELETEXTO son desactivados
- Todas las contraseñas son desactivadas
- En los retroproyectores la opción "antimarcado" se desactiva

2 TEMPORARY EXIT FROM SERVICE MODE

- Press Exit on the Remote control.
- Everyday use menu can be accessed via Menu button.

- Field Service Menu can be re-entrered via Blue button.

2 SORTIE TEMPORAIRE DU MODE SERVICE

- Utiliser la touche Exit de la télécommande.
- Le menu utilisateur peut être accessible via la touche "Menu.

- Pour entrer à nouveau dans le mode service utliliser la touche bleue.

2 VORÜBERGEHENDES VERLASSEN DES SERVICE MODE

- Auf der Fernbedienung EXIT drücken
- Mit der Taste MENÜ gelangen Sie zum Menü ÜBERSICHT

- Mit der blauen Taste gelangen Sie zurück in den Service-Mode.

2 USCITA TEMPORANEA DAL SERVICE MODE

- Premere Exit sul telecomando.
- Al menu di uso quotidiano si accede attraverso il pulsante Menu

- É possibile rientrate nel Menu Service tramite il pulsante Blue.

2 SALIDA TEMPORAL DEL MODO SERVICIO

- Pulse Salir en el mando a distancia
- Con el botón Menu puede acceder al menú de uso cotidian

- Puede entrar al Menú Servicio con el botón azul.

3 EXITING FROM SERVICE MODE

Remote Control

- Go to the point QUIT in the Field service Mode main menu.
- Press ">" button
- TV mode.

on/off key or Stand-by

- Stand-by function or "off" with on/off key.

Values or adjustments are no stored before exiting from service mode will not be written into the NVM

3 SORTIE DEFINITIVE DU MODE SERVICE

télécommande

- Aller au point "QUIT" dans le menu principal du mode service.
- Appuyer sur ">"
- Mode TV.

Inter M/A ou Stand-by

- Foncion Stand-by ou "off" par M/A

Les valeurs ou réglages non mémorisés avant la sortie ne seront pas écrites en NVM.

3 ENDGÜLTIGES VERLASSEN DES SERVICE MODES

Fernbedienung

- Gehen Sie im Hauptmenü des Service-Modes mit dem Cursor auf die Zeile QUIT.
- Taste ">"drücken
- TV Modus

Netzschalter oder Standby

- Mit Standby-Funktion oder Netzschalter ausschalten

Werte und Einstellungen, die nicht vor dem Verlassen des Service-Modes gespeichert wurden, werden nicht in den Permanentspeicher (EEPROM) übernommen.

3 USCIRE DAL SERVICE MODE

telecomando

- Andare al punto QUIT nel Modo service del Menu principale
- Premere ">"
- Modo TV.

Tasto on/off

- Funzione Stand-by o "off" con il tasto on/off

Valori e regolazioni non memorizzati prima di uscire dal Modo service e non vengono scritti nell'NVM

3 SALIDA DEL MODO SERVICIO

telecomando

- Vaya al punto QUIT del menú principal de modo Servicio
- Pulse el botón ">"
- Modo TV.

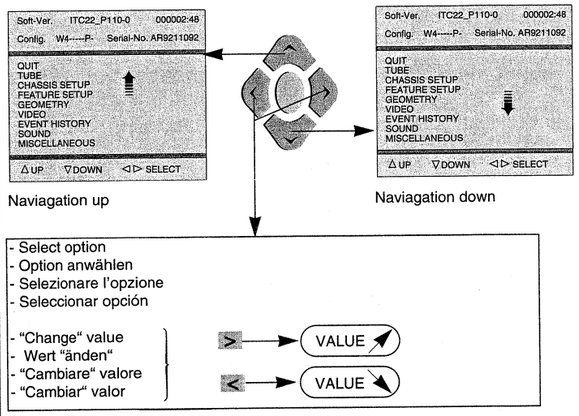
Tecla on/off de

-Stand-by o desconexión (off) con tecla on/off.

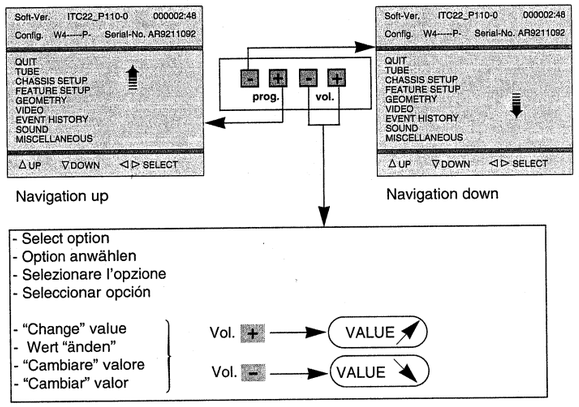
Los valores o ajustes no se guardan antes de salir del modo servicio y no se escriben en el NVM

II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE SUCHE IN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

1 REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA



2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE -



3 MENUS WITH MULTIPLE PAGES - MENUS A PLUSIEURS PAGES MENÜS MIT MEHREREN SEITEN

Changing page - Changement de page
Seitenwechsel - Cambiare Pagina - Cambio de página

- When the highlight is on the first line of a menu a press on the « Δ » key display the previous page.
- When the highlight is on the bottom line of a menu a press on the « ∇ » key display the next page.

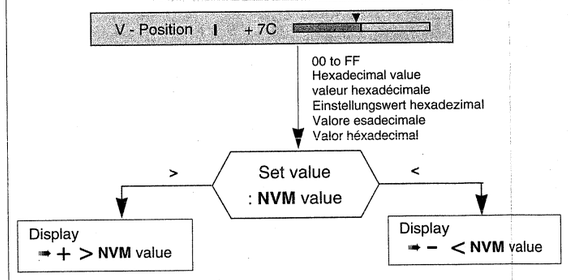
- Quand la 1ère ligne du menu est en surbrillance, un appui sur la touche « Δ » affiche la page précédente.
- Quand la dernière ligne du menu est en surbrillance, un appui sur la touche « ∇ » affiche la page suivante.

- Ist die oberste Menüzeile markiert, drücken Sie die « Δ »-Taste um die vorhergehende Seite anzuzeigen.
- Ist die unterste Menüzeile markiert, drücken Sie die « ∇ »-Taste um die nächste Seite anzuzeigen.

- Quando la prima linea del menu è illuminata premere il tasto « Δ » per visualizzare la pagina precedente.
- Quando l'ultima riga del menu è illuminata premere il tasto« ∇ »per visualizzare la pagina sucessiva.

- Cuando está seleccionada la primera línea de un menú, al pulsar « Δ » se pasa a la página anterior.
- Cuando está seleccionada la última línea de un menú, al pulsar « ∇ » se pasa a la página siguiente.

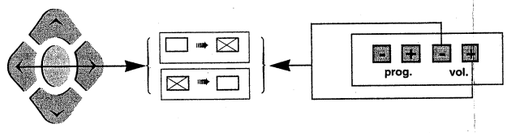
4 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELLUNGSWERTES VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - VISUALIZACION DEL VALOR DE AJUSTE



5 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALTFUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCION CONMUTACION

To enable a function check (tick) ☒ the box.
Pour valider une fonction cocher ☒ la case correspondante
Zum Implementieren einer Funktion das Kontrollkästchen ☒ aktivieren (ankreuzen)
Per implementare una funzione di verifica, (vistare) ☒ la casella
Para poner en fucionamiento una función verifique (señale) ☒ la casilla

☒ : Implemented function ☐ : No implemented function



6 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZAE I VALORI - VALORES ALMACENADOS EN LA MEMORIA

After setting, the values are stored in NVM.
Après réglages les valeurs sont mémorisées en NVM.
Nach dem Einstellen werden die Werte im NVM gespeichert.
Dopo la regolazione i valori vengono memorizzati in NVM.
Después del ajuste, los valores son almacenados en NVM

The box ☐ becomes ☒
During alignment, values are temporarily stored in RAM.
En cours d'alignement les valeurs sont mémorisées temporairement en RAM
Während des Abgleichs werden die Werte vorübergehend im RAM gespeichert
Durante l'allineamento i valori vengono memorizzati provvisoriamente sulla RAM
Durante el alineamento, los valores son almacenados temporalmente en RAM

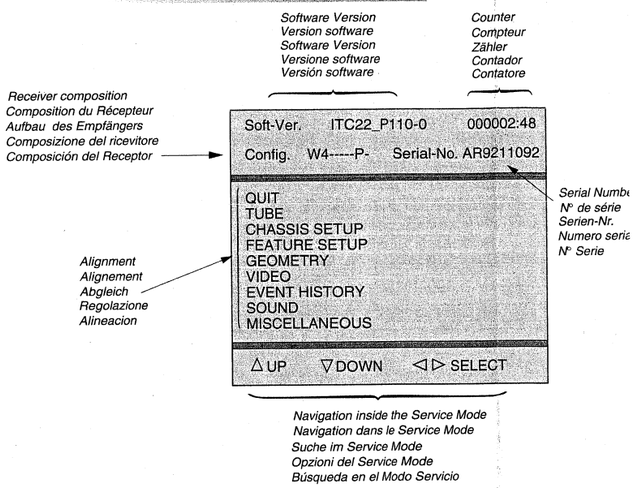
Store ➡ Copîes RAM values into NVM
Copie la valeur RAM en NVM
Kopieren des Wertes von RAM nach NVM
Copiare i valori RAM in NVM
Copiar valores RAM en NVM

Restore ➡ Copies all values from NVM into RAM.
Copie toutes les valeurs des données NVM en RAM
Kopiert alle NVM-Datenwerte in des RAM
Copiare tutti i valori da NVM sulla RAM
Copia todos los valores de NVM a RAM

Default ➡ All the default values of a page in use are stored in RAM.
L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.
Sämtliche Standardwerte der aktuellen Seite werden ins RAM geladen
Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM
Todos los valores por defecto de la página en curso están almacenados en RAM.

III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

1 MAIN MENU - MENU PRINCIPAL - HAUPTMENÜ



TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURAZIONE DEL TV - CONFIGURACIÓN Y TV

Config.	**W5Z.....V**

Character 1 : Tube type : "A"= 4:3 , "W" =16:9
Character 2 : AV4; "-" = not, "4" = yes
Character 3 : DVD / HDD; "-" = not, "D" = DVD, "H" = HDD (PVR)
Character 4 : "-" = not used
Character 5 : "-" = not used
Character 6 : "-" = not used
Character 7 : "-" = not used
Character 8 : Second Tuner (PIP) : "P" = yes, "-" = not
Character 9 : 3D Comb filter; "3" = yes, "-" = not

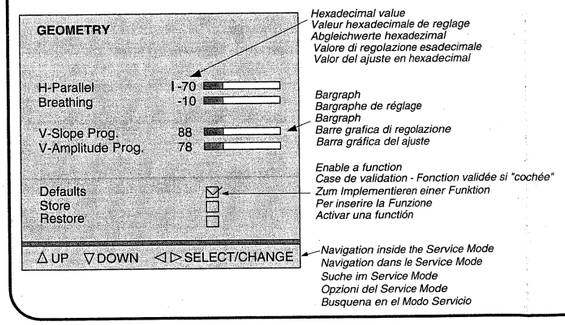
SERIAL-N°	**A15...**

Character 1 : Factory, A= Angers
Character 2 : Year : (N = 2001)
Character 3 : Month, from 1= January to 9=September...C=December.
Character 4-9 : Serial N° in the month (from 000000 to 999999)
Character 10-12 : Factory reserved

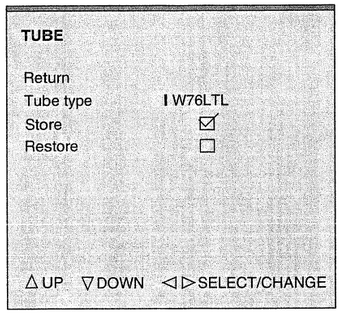
TIME COUNTER - COMPTEUR DE TEMPS - BERTRIEBSSTUNDENZÄHLER - CONTATORE - CONTADOR

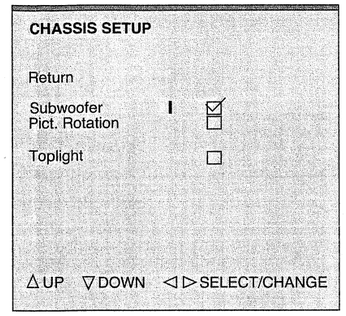
The counter indicates the TV's number of service hours.It is displayed as an eight-digit decimal. It shows the run time in hours and minutes.
Le compteur de temps indique le nombre d'heures de service du TV. L'affichage est composé de huit digits décimaux.
Der Betriebsstundenzähler zeigt die Betriebszeit des Gerätes in Stunden und Minuten an. Die Anzeige erfolgt als achtstellige Dezimalzahl.
Il contatore indica il numero di ore di servizio del TV. Vengono visualizzate tramite 8 digit decimali.Tale contatore mostra le ore e i minuti di funzionamento.
El contador indica el número de horas de servicio de la TV. Se muestra en formato decimal de ocho dígitos. Muestra el tiempo de funcionamiento en horas y minutos.

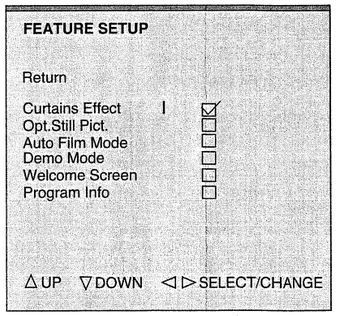
2 SUBMENU - SOUS-MENU - UNTERMENÜ



ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION







TUBE

Return

Closes the sub-menu and returns to the "Main Service Menu"

Retourne au menu principal.

Schließt das Untermenü, und das Haupt-Menü des Service-Modus erscheint.

Chiude il sottomenu e fa apparire il menu principale Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

Tube type

After replacing the NVM, the correct tube type number must be entered (6 characters). Once entered, the tubes geometry and video default values are immediately activated. Variable geometry and video parameters are written to the NVM when the "STORE" line is selected. See below the tube type number list.

Definit le tube exact après changement de NVM.
Les nouvelles valeurs de tubes (avec video et géometrie) sont actives de suite.
Les paramètres de vidéo et de géométrie sont chargés en NVM lorsque STORE est sélectionné. Voir liste ci-dessous.

Nach dem Tausch des NVM (EEPROM) muB der richtige Bildrohrtyp eingegeben werden. Es werden dann sofort die entsprechenden Geometrie-und Video-Defaultwerte aktiviert. Variable Geometrie-und Videowerte müssen mit "STORE" in das NVM geschrieben werden. Liste der Röhren: siehe unten.

Definire il tubo appropriato dopo aver cambiato la NVM; I valori per il nuovo tipo di tubo (con video e geometria) sono immediatamente attivi. I parametri per video e geometria variabili vengono immessi nella NVM quando viene selezionata la funzione Store. Si veda la lista dei tubi riportata sotto.

Definir el tubo correcto después de haber cambiado el NVM.Los nuevos valores de tipo de tubo (con la vídeo y la geometría por defecto) se activan inmediatamente. Los parámetros variables de geometría y vídeo se graban en el NVM al seleccionar la función Store. Vea más abajo la lista de tubos.

TUBE NAME	LIST	DESCRIPTION
W76LTL350X97(U)	W76LTL	16/9 32"XF (1)
W66ELC011X121	W66ELC	16/9 28"XF (2)
W86LQQ350X97(U)	W86LQQ	16/9 36"XF (2)
16X9 NT	-	-

(1) : Invar, dynamic Focus, BSVM TOSH.
(2) : Invar, static Focus, BSVM TOSH.

➞ After setting ➞ Store ☑

CHASSIS SETUP

Return

Closes the sub-menu and returns to the "Main Service Menu"

Retourne au menu principal.

Schließt das Untermenü, und das Haupt-Menü des Service-Modus erscheint.

Chiude il sottomenu e fa apparire il menu principale Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

Subwoofer*

Enable the subwoofer on equiped set.

Validation du Subwoofer sur les appareils équipés .

Einschalten des Subwoofers (wenn vorhanden).

Abilita il subwoofer negli apparecchi equipaggiati.

Validación de que existe el subwoofer.

☑ Subwoofer enable ☐ Subwoofer disable

Picture Rot*

Enables the "Earth Field Correction" function (EFC) on ITC222 16/9 and some large screen 4/3 by adding a special bargraph in the "personal settings" menu (user menus). It is necessary to validate this function if the EFC correction circuit is inserted.

Valide la fonction "correction de champ magnétique terrestre" (EFC) sur les chassis ITC222 16/9 et les appareils 4/3 grand écran par addition d'un bargraphe spécifique dans le menu "réglages personnels" (menu utilisateur). Cette fonction doit être validée lorsque les circuits de correction "EFC" sont insérés.

Freigabe der Erdfeldkorrektur (EFC) bei ITC222 16/9 und einigen 4/3 Geräten. Im Menü "Eigene Einstellungen" (Menü "Installation") wird ein zusätzlicher Anzeigebalken eingeblendet Nach dem Einbau des EFC-Moduls ist diese Funktiozu aktivieren.

Attiva la funzione "Correzione del campo magnetico terrestre" (EFC) sul telaio ITC222 16/9 e alcuni grandi schermi 4/3 , aggiungendo una speciale barra grafica nei menu di "Menu Principale". Se il circuito di correzione è montato, è necessario convalidare questa funzione.

Valida la función "corrección del campo magnético terrestre" (EFC) en los chasis ITC222 and some large screen 4/3 añadiendo una barra gráfica en el menú "Ajustes personales". Es necesario validar ésta función si el circuito de corrección EFC está montado.

☑ Rotation bargraph available menu, EFC function active.

☐ Rotation bargraph suppressed from personal settings, EFC circuit disactivated

Toplight*

Enable the "Toplight" function on equiped set.

Validation de la fonction "Toplight" sur les appareils équipés .

Aktivieren der "Toplight"-Funktion bei entsprechend ausgestatteten Geräten.

Abilitare la funzione "Top Light" nei set equipaggiati

Activa la función "Toplight" en los aparatos equipados con esta opción.

☑ Toplight enable ☐ Toplight disable

FEATURE SETUP

Curtains Effect

Enables the "Curtains Effect" function in the user preferences menus.

Valide la fonction "Effet de rideau" dans le menu des préférences utilisateurs.

Aktiviert die Funktion "Jalousie-Effekt" im Benutzer-Menü "Präferenzen".

Abilita "Effetto Tendina" funzione disponibile nel menu di preferenze.

Activa la función "Efecto Cortina" en los menús de preferencia del usuario.

☑ Curtains Effect function active.

☐ Curtains Effect function disactivated

Optimised Still Picture*

Enables the "Photo Mode" function in the user "Picture/Advanced use" menus .

Valide la fonction "Photo Mode" dans le menu "Image/Autres Réglages" des menus utilisateurs.

Aktivieren der "Photo-Mode"-Funktion im Benutzer-Menü "Bildeinstellungen/Weitere Einstellungen".

Abilitare nel menu "Immagine/Parametri avanzati" la funzione "Photo Mode".

Activa la función "Modo Foto" en el menú de usuario "Imagen/Otros ajustes".

☑ Opt. Still picture active.

☐ Opt. Still picture disactivated

Auto film Mode*

Enables the "Film mode" function in the user "Picture/Advanced use" menus .

Valide la fonction "Mode film" dans le menu "Image/Autres Réglages" des menus utilisateurs.

Aktivieren der "Filmmode"-Funktion im Benutzer-Menü "Bildeinstellungen/Weitere Einstellungen".

Abilitare nel menu "Immagine/Parametri avanzati" la funzione "Modo film".

Activa la función "Modo Film" en el menú de usuario "Imagen/Otros ajustes".

☑ Auto film active.

☐ Auto film disactivated

Demo Mode*

Enables the "Demo" key on the RCU.

Valide la touche "Demo" sur la télécommande.

Einschalten die Taste "Demo" auf der Fernbedienung.

Abilita il tasto "Demo" del telecomando.

Validación de la tecla "Dem" del mando a distancia.

☑ Demo Mode active.

☐ Demo Mode disactivated

FEATURE SETUP

Welcome Screen*

Determines whether or not a Welcome Screen is shown during the Installation Mode. When this checkbox is unchecked the "Contacts" user Menu will be disabled.

Valide l'écran de bienvenue durant le mode Installation.
Lorsque la case "Welcome Screen" n'est pas validée le menu utilisateur "Contacts" n'est pas valide.

Aktiviert den "Willkommen"-Bildschirm bei de Installation. Wenn diese Checkbox nicht markiert ist, wird das Benutzer-Menü "Contacts" nicht angezeigt.

Determina se lo schermo di Benvenuto viene mostrato durante il modo installazione.
Se la casella "Contacts" non viene selezionata il menu utilizzatore sarà disabilitato

Determina si durante el modo instalación se muestra o no la pantalla de bienvenida. Cuando no está señalada la casilla el menú del usuario "Contactos" estará desactivado.

☑ Welcome Screen enable

☐ Welcome Screen disable

Program Info*

Enables "Program Info" in the "Overview" menu of user functions.

Valide "Program Info" dans le menu "Sommaire" des fonctions utilisateurs.

Aktivieren der "ProgramInfo"-Funktion im Benutzer-Menü "Übersicht".

Abilitare nel menu "Sommario" la funzione "Programm Info"

Activa la opción "Program Info" en el menú de usuario "Sumario".

☑ Program Info enable.

☐ Program Info disable.

* *Changes are saved directly into NVM*

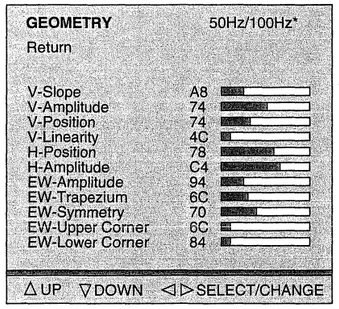
Tout changement est directement sauvegardé en NVM.

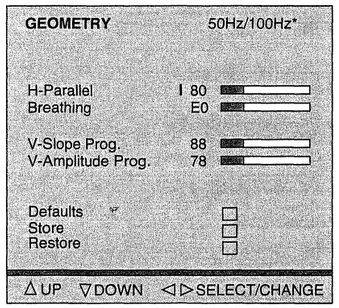
Die Werte werden direkt im NVM gespeichert

I cambiamenti sono salvati direttamente nella NVM.

Los cambios son directamente guardados en la NVM

ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION





Test Bar pattern used : 4/3 (50Hz/60Hz) with a geometric circle. Complete geometry Adjustment is done according to chassis tube format : **4/3** *mode for* **4/3** *tubes;* **16/9** *mode for* **16/9 tubes** *: see annexed .*

Mire de barre utilisée : 4/3 (50Hz/60Hz) avec cercle de géométrie. les réglages complets de géométrie sont faits dans le format du tube équipant l'appareil : mode **4/3** *pour les tubes* **4/3**; **16/9** *pour les appareils équipés de* **tubes 16/9** *(Voir ci-contre).*

Verwendetes Testbid : 4/3 (50Hz/60Hz) mit geometrischem Kreis. Ein vollständiger Geometrie-Abgleich ist nur notwendig bei: **4/3-Röhren** *Zoomstufe* **4/3** *und* **16/9-Röhren** *Zoomstufe* **16/9** *(siehe unten) .*

Formato Testo utizzato: 4/3 (50Hz/60Hz) con cerchio geometrico. La regolazione viene effettuata nel formato del telaio del cinescopio: **4/3** *:tubo* **4/3**; **16/9** *: tubo* **16/9**.

Carta de ajuste utilizada : 4/3 (50Hz/60Hz) con círculo geométrico. El ajuste completo de la geometría hay que hacerlo de acuerdo con el tipo de chasis y el formato del tubo : Modo **4/3** *para tubos de* **4/3**; *modo* **16/9** *para tubos de* **16/9**.

* *50/100Hz or 60/120Hz according to signal*

GEOMETRY

V-Slope

- Apply a test pattern signal to the TV with a single horizontal and vertical line on the screen.
- Select the "**V-Slope**" line of the menu. The bottom half of the screen will go black.
- Adjust VS until the centre line of the pattern is just invisible.
- Leave the line "**V-Slope**".
- Switch the test pattern signal to the crosshatch geometry pattern.
- Perform the geometry adjustments described below.

- Appliquer une mire de barres avec seulement une ligne blanche horizontale en milieu de l'écran.
- Sélectionner la ligne "**V-Slope**". La moitié basse de l'écran devient noire.
- Aligner "**V_Slope**" pour que la ligne médiane soit à peine non visible.
- Commuter la mire en mode de réglage de géométrie (quadrillage).
- Effectuer les reglages de geometrie.

- Speisen Sie ein Testbild mit einem horizontalen Strich in der Bildmitte ein.
- Wählen Sie im Menü die Funktion "V-Slope" an. Die untere Bildhälfte wird dunkel.
- Stellen Sie "V-Slope" so ein, daß die Mittellinie fast verschwindet.
- Verlassen Sie die Funktion "V-Slope".
- Speisen Sie ein Gittertestbild ein.
- Nehmen Sie die Geometrieeinstellungen wie nebenstehend beschrieben vor.

- Applicare un monoscopio con un'unica linea bianca orizzontale al centro dello schermo
- Selezionare la riga "**V-slope**" del menu. La parte bassa dello schermo viene oscurata.
- Allineare la "Vertical Slope" in modo che la linea centrale sia appena visibile
- Abbandonare la riga "**V-slope**".
- Posizionare il monoscopio
- Effettuare le regolazioni di geometria descritte in precedenza
- Memorizzare.

- Aplique una carta de ajuste con sólo una línea blanca horizontal y una vertical en el centro de la pantalla.
- Seleccionar en el menú, la línea "**V-Slope**". La mitad inferior de la pantalla se pondrá oscura.
- Ajuste "**V-Slope**" justo hasta que la línea horizontal sea invisible.
- Cambiar la carta de ajuste a "cuadrícula" y efectuar los ajustes de geometria descritos a continuación
- Antes de salir, memorizar con "Store"

→ After setting → Store ☑

GEOMETRY

V-Amplitude		
V-Position		
V-Linearity		
H-Position		
H-Amplitude		
EW - Amplitude		
EW - Trapezium		
EW-Symmetry		
EW-Upper Corner		
EW-Lower Corner		

→ After setting → Store ☑

GEOMETRY

H-Parallel		

Breathing
EHT compensation

Factory adjusted
Réservé au réglage usine
Reserviert für Fabrikeinstellungen
Riservato alla regolazione di fabbrica
Ajuste reservado fábricas

V-Slope Prog.*

Select the "**V-Slope Prog.**" line of the menu and process as V-Slope adjustment.

Sélectionner la ligne "**V-Slope Prog.**" et procéder comme pour le réglage V-Slope

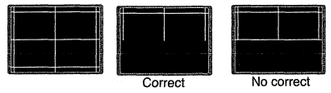
Wählen Sie die Menüzeile "**V-Slope Prog.**" an und fahren mit dem Abgleich wie unter „V-Slope" beschrieben fort.

Selezionare la linea "**V-Slope Prog.**"nel menu e procedere come per la regolazione V-Slope.

Seleccionar la línea "**V-Slope Prog.**"del menú y proceder como para el ajuste V-Slope.

V-Amplitude Prog.*		

V-Slope / V-Slope Prog.



* *An error message is displayed in case of connected progressive (2H/1V) signal on components (AV4) input.*

Un message d'erreur est affiché en cas de source de signal progressif (2H/1V) connectée sur l'entrée composantes (AV4).

Sollte eine progressiv abgetastete Signalquelle (1H/1V) am Komponenten-Eingang AV4 angeschlossen sein, erscheint eine Fehlermeldung.

Un messaggio messaggio Error viene visualizzato nel caso una sorgente segnale progressivo (2H/1V) collegato sull'entrata component AV4.

Se muestra un mensaje de error en el caso de conectar una señal progresiva (2H/1V) en la entrada de componentes (A V4).

→ After setting → Store ☑

RASTER SHIFT CORRECTION - CENTRAGE DE BALAYAGE HORIZONTAL - BILDLAGE-EINSTELLUNG CENTRATURA DEFLESSIONE ORIZZONTALE - CORRECCIÓN DEL CENTRADO HORIZONTAL

- Check and adjust if necessary the Raster shift correction.
  See "Adjustments" table p. 11.

- Contrôler et régler si nécessaire le centrage de balayage horizontal
  Voir le tableau des réglages page 11.

- Überprüfen Sie die Einstellung der Bildlage und korrigieren Sie diese ggf. wie in der Tabelle "Abgleich" auf Seite 11 beschrieben.

- Controllare e regolare se necessario la correzione raster.
- Vedere le regolazioni alla tavola pag 11.

-Comprobar y ajustar si es necesario el centrado del barrido horizontal.
Ver la tabla de ajustes en pág. 11.

GEOMETRY MODE ALIGNMENT

A ITC222 16/9 set needs a geometry alignment only in the 16/9 mode and additionally an alignment of V-Slope Prog., V-Amplitude Prog. in progressive mode. All other formats and zoom mode are calculated.

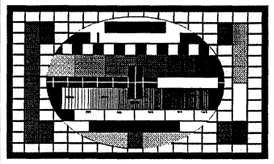
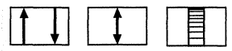
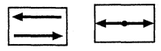
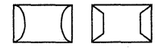
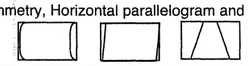
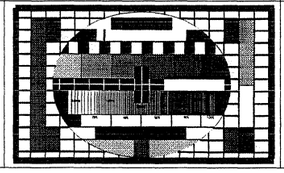
Un chassis ITC222 16/9 ne nécessite des réglages de géométrie que dans le mode 16/9 et additionnellement un réglage de V-Slope Prog., V-Amplitude Prog en mode progressif. La géométrie des autres formats et zoom est calculée.

Beim Chassis ITC222 ist ein Geometrie-Abgleich nur im Bildformat 16:9 und zusätzlich der Abgleich von V-Slope Prog und V-Amplitude Prog. im Progressiv-Mode not-wendig. Alle anderen Formate und Zoomstufen werden berechnet.

I telai ITC222 16/9 richiedono la regolazione di geometria solo in formato 16/9 e un addizionale regolazione V-Slope Prog., V-Amplitude Prog in progressive mode. tutti gli altri formati e modo zoom vengono calcolati.

Un TV ITC222 16/9 necesita ajuste de geometría sólo en el modo 16/9 0 y adicionalmente un ajuste del V-Slope Prog y V-Amplitude Prog en modo progresivo. Todos los demás formatos y modos de zoom se calculan automáticamente.

Signal : 4/3 test pattern

16 / 9 standard mode zoom 0		**Overscan V=107%, H =104%** 1- Adjust Vertical Slope. 2- Adjust Vertical position and Vertical amplitude 3- Adjust Vertical linearity  4- Adjust Horizontal Position and Horizontal amplitude  5-Adjust EW Amplitude, EW Upper/Lower Corner,  6-Adjust EW Symmetry, Horizontal parallelogram and EW Trapezium 
16 /9 progressive mode		**Overscan V=107%, H =104%** 1- Adjust Vertical Slope. 2- Adjust Vertical Amplitude

ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION

VIDEO		PAL BG
Return		
Peak White	I	
Whitepoint R	74	
Whitepoint G	64	
Whitepoint B	60	
G2 alignment		
Scalling Colour	66	
Scalling Brightness	84	
Cutoff R	80	
Cutoff G	E0	

△ UP ▽DOWN ◁▷SELECT/CHANGE

VIDEO		PAL BG
Scaling Contrast	I DE	
Contrast max	☐	
Text Contrast	D8	
Full White 4/3	38	
Drive Level	60	
Defaults	☐	
Store	☐	
Restore	☐	

△ UP ▽DOWN ◁▷SELECT/CHANGE

VIDEO PAL

Return

Closes the sub-menu and returns to the "Main Service Menu"

Retourne au menu principal.

Schließt das Untermenü, und das Haupt-Menü des Service-Modes erscheint.

Chiude il sottomenu e fa apparire il menu principale Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

Peak-White** ☼+◑+◔ = standard

Peak white test pattern
white =100%
PAL, SECAM, RGB,RGB_AUX
COMP1H, COMP2H

Colourimeter

Tube Type	[Nits]
W76LTL	310
W66ELC	-
W86LQQ	300

Whitepoint R*
Whitepoint G*
Whitepoint B* ☼+◑+◑ = standard

Grey scale test pattern
white =50%
RF-PAL/SECAM
RGB, RGB_AUX
COMP1H, COMP2H

grey

G2 Alignment

Display a full screen black OSD. Adjust G2 with SCREEN potentiometer: see adjust table (p.11/12)

Ecran totalement noir.
Régler G2 avec le potentiomètre SCREEN : voir tableau des réglages.(p.11/12).

Das Bild wird dunkelgetastet
Gleichen Sie G2 mit dem SCREEN-Potentio-meter wie auf seite 11/12. beschrieben ab.

Visualizzare uno schermo nero e regolar il potenziomero G2 riferendos alla tabella regolazione (p.11/12)

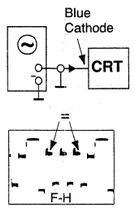
Pantalla totalmente oscura sin OSD. Ajustar la G2 con el potenciómetro SCREEN: ver tabla (p.11/12).

Color standard or RGB is autodetected and displayed opposite the displayed opposite the menu title.

VIDEO PAL

Scaling Colour* ☼+◑+◑ = standard

PAL, SECAM, RGB
COMP1H, COMP2H
75% Colour bar test pattern
via RF.



Scalling Brightness ☼+◑+◑ = standard

Grey scale test pattern

white =100%

black

Cutoff R
Cutoff G
Scalling Contrast

Factory adjusted
Réservé au réglage usine
Reserviert für Fabrikeinstellungen
Riservato alla regolazione di fabbrica
Ajuste reservado fábricas

Contrast max

Set (temporary) the user contrast bargraph to max. When "Contrast max." is deselected the user contrast bargraph set back to the previous value.

Met (temporairement) le baragraphe du réglage de contraste utilisateur au maximum.
Lorsque "Contrast max." est déselectionné Le baragraphe revient à sa valeur initiale.

Setzt (temporär) den User-Kontrast auf Max.Nach dem Abschalten von 'Contrast max' wird auf der Bar-Graph auf vorherigen Wert zurückgesetzt

Regolare (momentaneamente) la barragrafica del contrasto al massimo.Quando "Contrasto massimo" viene disinserito la barra grafica utilizzatore viene regolata al volume precedente.

Ajusta (temporalmente) la barra de contraste del usuario al máximo. Cuando no esté seleccionado "Contraste Máximo" la barra de contraste del usuario vuelve a su valor anterior.

☑ Contrast max. enable
☐ Contrast max. disable

→ After setting → Store (+) ☑

VIDEO PAL

Text Contrast ☼+◑+◑ = standard

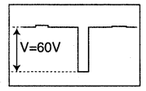
Adjust Text contrast for V=60V at pin 11 (Blue) of the CRT : 40% V peak white

Ajuster Text Contrast pour obtenir un niveau de sortie V=60V sur la cathode Bleue du tube (point 11 de la CRT): 40% V peak white.

Stellen Sie mit Text Contrast V=60V an der Blau-Kathode (Pin 11) der Bildröhre ein: 40% Vpeak white

Regolare il guadagno contrasto televideo per ottenere al catodo del blu un livello pari a V=60V (CRT pin 11): 40% Vpeak white.

Ajuste Text Gain para dejar V=60V en azul del TRC (CRT Patilla 11): 40% Vpeak white



CRT Pin 11

Full White 4/3 Factory adjusted
Réservé au réglage usine
Reserviert für Fabrikeinstellungen
Riservato alla regolazione di fabbrica
Ajuste reservado fábricas

Drive Level

→ After setting → Store (+) ☑

Note :
* Adjust separate for PAL RF/SECAM RF and RGB_AUX

** After PEAK white adjustment control whitepoints setting.
Repeat the adjustments if necessary.

EVENT HISTORY		000029:04
Return		
Clear Event Codes	I	☐
Code	Count	Time Stamp
36	002	000028:34
00	000	000000:00
00	000	000000:00
00	000	000000:00
00	000	000000:00

EVENT HISTORY

Return

Closes the sub-menu and returns to the "Main Service Menu"

Retourne au menu principal.

Schließt das Untermenü, und das Haupt-Menü des Service-Modes erscheint.

Chiude il sottomenu e fa apparire il menu principale Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

Clear Event Codes

To clear all event codes stored in the NVM. Action: Long press (> 2.5sec.).

Press </>/OK: remote control.

CODE

1- The last five error codes are stored and displayed with a time stamp from the run time counter
2- If an error occurs that is already in the list the time stamp is updated .
3- The errors are displayed with the most recent error on top of the list. The others follow with descending time stamps.

List of Errors Codes : see table

1- Mémorise les cinq derniers codes erreurs.
Le cumul du temps de fonctionnement entre le démarrage initial du chassis en usine et le moment où s'est produit l'erreur est indiquée en colonne "Time stamp".
2. Si une erreur qui est déjà dans la liste survient de nouveau le temps cumulé (Time stamp) est mis à jour.
3- Les erreurs les plus récentes sont affichées en tête de liste. Les autres suivent en descendant.

Voir ci-après la liste des codes erreurs

1. Es werden die letzten 5 Fehlercodes mit der Laufzeit des Auftretens angezeigt.
2. Tritt ein Fehler auf, der schon in der Liste steht, wird nur die Laufzeitanzeige aktualisiert.
3. Der zuletzt aufgetretene Fehler steht an erster Stelle. Die vorhergegangenen Fehler werden nach abnehmender Laufzeit gelistet.

Aufstellung der Fehlercodes: siehe Tabelle

1- Gli ultimi cinque codici errore vengono memorizzati e visualizzati con un time stamp dal run time counter.
2- Se si manifesta un errore già presente nella lista il time stamp viene aggiornato
3- Gli errori vengono visualizzati con l'errore più recente in cima alla lista.
Gli altri errori seguono con sequenza discendente del time stamp

Lista Codici Errore: segue tabella

1- Los últimos 5 códigos de error son almacenados desde el contador de tiempo de vida y mostrados en la columna "time stamp"
2- Si ocurre un error que ya existe en la lista, éste se actualizará al último "time stamp"
3- Los errores más recientes son los mostrados en la parte superior de la lista. Los demás siguen en orden descendiente de "time stamp"

Lista de códigos de error: ver tabla

SOUND SETTINGS		
Return		
Effect Strength (MED)	I	3F
Effect Strength (HIGH)		43
Low Pass Frequency		08
High Pass Frequency		04
Sub-woofer corner Freq.		14
Defaults		☐
Store		☐
Restore		☐

△ UP ▽DOWN ◁▷SELECT/CHANGE

SOUND SETTINGS

Return

Closes the sub-menu and returns to the "Main Service Menu"

Retourne au menu principal.

Schließt das Untermenü, und das Haupt-Menü des Service-Modes erscheint.

Chiude il sottomenu e fa apparire il menu principale Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

Adjust "Sound settings" registers according to the TV environments (refer to the below table) when the NVM memory has been replaced. On entering this menu the sound mode will be switched to normal and the "Dynamic Bass" feature activated.

Règle le contenu des registres "Sound settings" selon l'environnemnt du TV en cas de remplacement de la NVM. (voir table ci-dessous) en entrant dans ce menu le mode son est commuté en normal et les caractéristiques "Dynamic Bass" sont activées.

Wurde das NVM (EEPROM) erneuert, müssen im Menü "SOUND SETTINGS" die Werte entsprechend der unten stehenden Tabelle eingestellt werden.
On entering this menu the sound mode will be switched to normal and the "Dynamic Bass" feature activated.

Quando viene sostituita la memoria NVM regolare i registri "Sound setting" in funzione all'anbientazione TV (riferirsi alla tabella sottoindicata).
On entering this menu the sound mode will be switched to normal and the "Dynamic Bass" feature activated.

Ajustar los "Parámetros de Sonido" de acuerdo a las características del modelo de TV (ver tabla),después de sustituir la memoria NVM. On entering this menu the sound mode will be switched to normal and the "Dynamic Bass" feature activated.

Effect Strength (MED)	3F
Effect Strength (HIGH)	43
Low Pass Frequency	08
High Pass Frequency	04
Sub-woofer corner Freq.	14

→ After setting → Store (+) ☑

MISCELLANEOUS		
Return		
Clear Progs	I	☐
Default Presets		☐
Bus Quiet		☐
Development Support		☐
Restore Factory Settings		☐
FFI-Bit		☐
Switch 2nd Tuner to Main		☐

△ UP ▽DOWN ◁▷SELECT/CHANGE

MISCELLANEOUS

Return

Closes the sub-menu and returns to the "Main Service Menu"

Retourne au menu principal.

Schließt das Untermenü, und das Haupt-Menü des Service-Modes erscheint.

Chiude il sottomenu e fa apparire il menu principale Service Mode.

Cierra el submenú. El menú Field Service Mode aparece.

Press </>: remote control; Vol. +/- : TV keyb.

Clear Progs.

Clears all programms stored in memory and resets all Picture and Sound settings to the factory defaults. The AUTO INSTALL (out of factory) mode can be initialised by a long press (>2s.) of the selection button.

Efface tous les programmes mémorisés.
Valeurs SON et IMAGES: valeurs usines.
Fonction valide par une longue pression (>2s.) sur la touche de sélection </>.

Löscht alle Programmplätze und setzt alle Bild- und Toneinstellungen auf Fabrikwerte zurück. Der AUTO-INSTALL-Modus kann durch einen langen Knopfdruck (>2s) initialisiert werden.

Clear Prog.
Cancella tutti i programmi in memoria e regola i Valori analogici SUONO IMMAGINE: ai livelli di fabbrica.Riportare la TV al modo Selezione: pressione prolungata: 2 sec. su il pulsante </>.

Programa de borrado.
Borra todos los programas almacenados en la memoria.Valores analógicos de IMAGEN y SONIDO: valores de fábrica.Regreso a la TV para "salir del modo fábrica".Selección: Presión larga igual a 2s.

☑ Clear Progs enable
☐ Clear Progs disable

Default Presets

Sets the default (ROM) value for all the factory sound and picture presets.

Initialise aux valeurs par défaut (ROM) les réglages usine du son et de l'image.

Aktiviert die Default- (ROM-) Werte für alle Ton- und Bildvoreinstellungen.

Regolare i valori di default (ROM) valori di fabbrica per le regolazioni suono e Video

Fija el valor del valor por defecto (ROM) para todas las precolocaciones del sonido y del cuadro de la fábrica.

☑ Default Presets enable
☐ Default Presets disable

ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - PROCEDIMIENTO DE ALINEACION

MISCELLANEOUS

Return

Clear Progs; I ☐
Default Presets ☐
Bus Quiet ☐
Development Support ☐
Restore Factory Settings ☐
FFI-Bit ☐
Switch 2nd Tuner to Main ☐

△UP ▽DOWN ◁▷SELECT/CHANGE

MISCELLANEOUS

Bus Quiet

In "Bus Quiet", the NVM can be read, modified and reprogrammed by means of a NVM Programmer.
To access "Bus Quiet" : Long press ">".
The TV should remain in "Bus Quiet" mode until either Exit, Left, Right, Up,Down or Standby keys on the RCU or local keyboard are pressed; at which point the TV should carry out a warmstart in order to prevent differences between the NVM and RAM contents.
After returning from Bus Quiet, the software checks the NVM content.
If it is not valid, the software perform a new default writing of the NVM content.

En mode bus quiet la NVM peut être lue, modifiée et reprogrammée.
Accès au mode Bus quiet :
Longue pression ">".
Utiliser l'une des touches Exit, Gauche, Droite Haut, Bas, standby ou une des touches du clavier pour sortir le téléviseur du mode bus quiet.
A partir de ce point de sortie le démarrage du téléviseur s'effectue à chaud pour éviter toute différence des contenus RAM et NVM.
En sortie de mode bus quiet, le logiciel contrôle le contenu de la NVM.
S'il n'est pas correct le logiciel exécute une nouvelle écriture par défaut de celle-ci.

Im "Bus Quiet"-Modus kann der Inhalt des NVM mittels eines externen NVM-Programmiergerätes ausgelesen, geändert oder neu programmiert werden. "Bus Quiet" wird einem längeren Druck auf ">" aktiviert.
Das Gerät bleibt solange im "Bus Quiet" -Mode, bis durch Druck auf die EXIT-, LINKS-, RECHTS-, HOCH-, RUNTER- oder STANDBY-Taste (am Gerät oder auf der Fernbedienung) ein Warmstart des Gerätes veranlaßt wird, um unterschiedliche Daten in RAM und NVM zu vermeiden.
Es folgt ein Software-Check des NVM-Inhaltes.
Sollte dieser nicht gültig sein, wird der Inhalt mit Default-Werten überschrieben.

In Modo Bus Quiet, la memoria NVM può essere letta, modificata o riprogrammata.
Per accedere al modo Bus Quiet premere a lungo il tasto ">".
Il TV rimane in modo Bus Quiet
fino a che vengono premuti i tasti Exit, o Destro Sinistro, Su o Giù o Standby dal telecomando o dalla tastiera locale; a questo punto il TV riparte per evitare interferenze tra i contenuti della memoria NVM e della RAM.
All'uscita dal modo Bus Quiet, il software controlla il contenuto della memoria NVM. Se tale contenuto non è valido, il software provvede a una nuova programmazione della NVM con l'inserimento dei dati di default.

En bus quieto, la NVM puede ser leída, modificada y reprogramada.
Acceso a bus quieto : Larga presión en ">"
El TV permanecerá en bus quieto hasta que se pulse cualquiera de las teclas siguientes: Exit, "<", "^", "V", ">"o Standby del telemando o del teclado.
En este momento el TV arrancará para evitar cualquier diferencia entre los contenidos de la RAM y NVM.
Al salir del modo bus quieto, el software comprueba el contenido de la NVM.
Si no coincide, el software ejecuta la escritura de los datos en la NVM.

☑ Bus quiet enable ☐ Bus quiet disable

MISCELLANEOUS

Developpement Support

Factory adjusted
Réservé au réglage usine
Reserviert für Fabrikeinstellungen
Riservato alla regolazione di fabbrica
Ajuste reservado fábricas

Restore Factory Settings

Restores the correct "out of box" condition. Some settings will be restored from a reserved backup NVM area and others will be defaulted from the ROM.

Remet les réglages aux valeurs de sortie usine. Certaines valeurs sont restaurées à partir d'une zone de mémoire NVM et d'autres à partir des valeurs par défaut de la ROM.

Überschreibt den jeweiligen Abgleich mit Werten aus dem ROM und aus besonderen, reservierten Bereichen des NVMs.
Der Abgleich entspricht dann dem, den das Gerät beim Verlassen der Produktionsstätte hatte.

Rimettere le regolazioni ai valori di fabbrica Alcune regolazioni saranno ripristinate da una zona riservata dalla memoria NVM, altre regolazioni saranno riprese dalla ROM di default.

Vuelve a poner los ajustes a los valores de salida de la fábrica.
Se restauran algunos valores a partir de una zona de memoria NVM y de otros a partir de los valores por defecto de la ROM.

FFI - Bit	Fast Filter (IF / PLL) Filtre rapide (FI / PLL) Schnelles filter (ZF / PLL) Filtro /rapido (IF / PLL) ☑ Asia ☐ Europe

Switch 2nd Tuner to Main

The current signal on the second tuner is switched to the main screen and the AV1 output.
Changing program/channel on main tuner, the main screen stays on the second tuner.

Commute le signal du second tuner en image principale et en sortie AV1.
L'écran reste sur l'image du secont tuner malgré tout changement de programme/canal sur le tuner principal.

Das jeweilige Eingangssignal des zweiten Tuners wird auf dem Hauptbildschirm dargestellt und auf den AV1-Aushang geschaltet.
Bei einem Programm/Kanalwechsel auf dem Haupttuner bleibt das Bild des zweiten Tuners auf dem Hauptbildschirm sichtbar.

Commutare il segnale del secondo tuner sullo schermo e in uscita AV1
Lo schermo resta sull'immagine del secondo tuner, malgrado tutti i cambiamenti di progamma/canale sul tuner principale

La señal actual en el segundo sintonizador se cambia a la pantalla principal y a la salida AV1. Program/channel que cambia en el sintonizador principal, la pantalla principal permanece en el segundo sintonizador.

☑ Switch 2nd Tuner to Main enable
☐ Switch 2nd Tuner to Main disable

ERROR CODES

EN

11	I2C bus_1 data line held low
12	I2C Bus_1 clock line held low
13/95	I2C Bus_2 data line held low
14/95	I2C Bus 2 clock line held low
15	I2C Bus_3 data line held low
16	I2C Bus 3 clock line held low
17	I2C Bus_4 data line held low
18	I2C Bus 4 clock line held low
19	Invalid chassis detected
25	Main tuner doesn't answer anymore
26	Secondary tuner (PIP) doesn't answer anymore
27	IX300 (TEA6415C) doesn't answer anymore
28	IV300 (TA1360) doesn't answer anymore
29	9V IV300 Power down detection
31	IV400 (TDA9330H) doesn't answer anymore
32	8V IV400 Power down detection
33	Deflection:Safety circuit has detected a problem (4/IV400) - BV500 not connected
34	PHI2_REF not available
35	NRF bit problem. IV400 TDA9330 (HOP) oscillator not locked
36	Tube gets not warm in time
37	V_GUARD does not available
38	XPR Bit. IV400 (TDA9330H).X radiation safety activated.
39	PH1 problem, IV400 TDA9330 (HOP) oscillator not lock in time
41	IA001 (MSP) doesn't answer anymore
42	The reset bit IA001 (MSP) is active
45	Wrong MSP is fitted
46	Main FI doesn't answer anymore
47	FI 5V Power down detection
48	PIP FI doesn't answere anymore
49	5V PIP FI Power down detection
51	IV100 (VSP9407) doesn't answer anymore
52	Upconverter IV100 : Power down detection (3V3_UC)
54	NVM IR005 (M24C64) doesn't answer anymore
55	IR006 (PCF8574) doesn't answer anymore
56	Bit FLS problem IV400 (TDA9330)
58	Code validation failed
59	Wrong IR001 is fitted
61	5VON not present
62	5V and 8V not available
63	Unexpected level on NMI line found
64	XRP adjustment detected overvoltage
65	Write to NVM failed
66	NVM Contents are corrupt
68	The switched 5V not available
69	H/V Synch. for OSD missing
72	IX400 (CXA2151) doesn't answer anymore
93	IR001 : Err_I2C Bus_1 and Err_I2C Bus_2 (Bus drivers)
94	IR001 : Err_I2C Bus_3 and Err_I2C Bus_4 (Bus drivers)
95	IR001 : Err_I2C. Port driver can not be installed
96	IR001 : ADC driver can not be installed
97	IR001 : AV-link driver can not be installed
98	SDRAM (IR110) Problematic SDRAM timing
99	IR001 Watchdog hit

FR

11	I2C bus_1 data est au niveau bas
12	I2C bus_1 clock est au niveau bas
13/95	I2C bus_2 data est au niveau bas
14/95	I2C bus_2 clock est au niveau bas
15	I2C bus_3 data est au niveau bas
16	I2C bus_3 clock est au niveau bas
17	I2C bus_4 data est au niveau bas
18	I2C bus_4 clock est au niveau bas
19	Erreur de chassis détecté
25	Tuner principal ne répond pas
26	Tuner secondaire (PIP) ne répond pas
27	IX300 (TEA6415C) ne répond pas
28	IV300 (TA1360) ne répond pas
29	Chute de l'alimentation 9V IV300
31	IV400 (TDA9330H) ne répond pas
32	Chute de l'alimentation 8V IV400
33	Déviation: Circuit de sécurité a détecté un problème (4/IV400) - BV500 déconnecté
34	PHI2_REF absent
35	NRF bit problème IV400 TDA9330 (HOP) oscillateur non verrouillé
36	Tube ne chauffe pas à temps
37	V_GUARD does not available
38	XPR IV400 (TDA9330H).Sécurité rayons X activée.
39	PH1, IV400 TDA9330 (HOP) oscillateur non verrouillé à temps
41	IA001 (MSP) ne répond pas
42	IA001 (MSP) en reset
45	Mauvais MSP monté
46	FI principale ne répond pas
47	Chute alimentation 5V FI principale
48	FI PIP ne répond pas
49	Chute alimentation 5V FI PIP
51	IV100 (VSP9407) ne répond pas
52	Chute de l'alementation 3V3_UC - Upconverter IV100
54	NVM IR005 (M24C64) ne répond pas
55	IR006 (PCF8574) ne répond pas
56	Problème bit FLS IV400 (TDA9330)
58	Mauvaise validation de Code erreur
59	Mauvais IR001 monté
61	5V n'apparaît pas au départ
62	5V et 8V absents
63	Niveau incorrect sur la ligne NMI
64	Surtension détectée
65	Problème écriture NVM
66	Contenu NVM corrompu
68	5V commuté disparaît.
69	Synch. H/V (OSD) absente
72	IX400 (CXA2151) ne répond pas
93	IR001 : Problème d'installation des drivers des bus I2C1 et I2C2
94	IR001 : Problème d'installation des drivers des bus I2C3 et I2C4
95	IR001 : Problème d'installation des ports ou des drivers I2C
96	IR001 : Problème d'installation des drivers ADC
97	IR001 : Problème d'installation du driver AV-link
98	Problème du timing SDRAM (IR110)
99	IR001 Watchdog actif

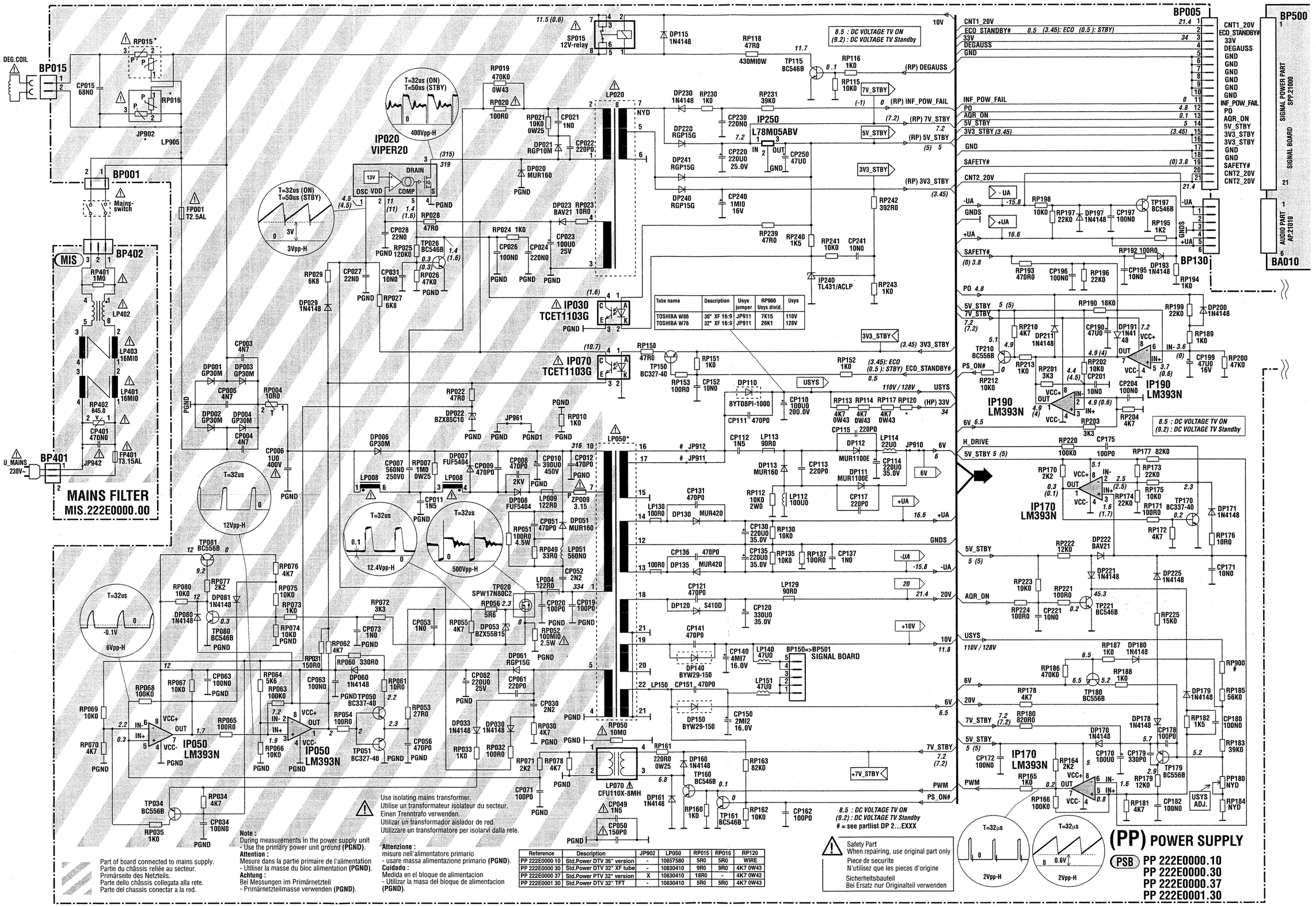
DE

11	I2C Bus_1 Data ist immer L
12	I2C Bus_1 Clock ist immer L
13/95	I2C Bus_2 Data ist immer L
14/95	I2C Bus_2 Clock ist immer L
15	I2C Bus_3 Data ist immer L
16	I2C Bus_3 Clock ist immer L
17	I2C Bus_4 Data ist immer L
18	I2C Bus_4 Clock ist immer L
19	Falsche Chassisvariante
25	Haupttuner/ZF Tunerteil antwortet nicht
26	Zweiter (PIP-)Tuner Tunerteil antwortet nicht
27	IX300 (TEA6415C) antwortet nicht
28	IV300 (TA1360) antwortet nicht
29	Power Down Detection IV300 (9V zu geringe Betriebsspannung)
31	IV400 (TDA9339H) antwortet nicht
32	Power Down Detection IV400 (8V zu geringe Betriebsspannung
33	Ablenkung: Schutzschaltung ist aktiv (4/IV400) - BV500 nicht verbunden
34	NHF Flag IV400 (TDA9330H) Pin 13 PHI2_REF fehlt
35	NRF Flag IV400 (TDA9330H) Referenz-PLL (Clock) nicht eingerastet
36	Bildrohr ist nicht rechtzeitig aufgeheizt (Signal Icut nicht korrekt)
37	NDF Flag IV400 (TDA9330H) Pin 9 V_GUARD fehlt oder dauert zu lange
38	XPR Flag IV400 (TDA9330H) Überspannungsschutz Hochspannung hat ausgelöst
39	PH1 Flag IV400 (TDA9330H) Referenz-PLL (Clock) nicht rechtzeitig eingerastet
41	IA001 Audio-MSP antwortet nicht
42	IA001 Audio-MSP Reset-Bit ist aktiv
45	Falscher MSP-Typ eingesetzt
46	Haupttuner/ZF ZF-Teil antwortet nicht
47	Power Down Detection ZF-Teil Haupttuner/ZF (5V zu geringe Betriebsspannung)
48	Zweiter (PIP-)Tuner ZF-Teil antwortet nicht
49	Power Down Detection ZF-Teil PIP-Tuner/ZF (5V zu geringe Betriebsspannung)
51	IV100 (VSP9407) antwortet nicht
52	Power Down Detection (3V3_UC zu geringe Betriebsspannung)
54	NVM IR005 (M24C64) antwortet nicht
55	IR006 (PCF8574, Portexpander) antwortet nicht
56	FLS Flag IV400 (TDA9330H) Pin 5 ('FLASH')
58	Event-Code konnte nicht bestätigt werden
59	Falsche Version des Microcontrollers IR001
61	Geschaltete 5VON nicht vorhanden
62	5V und 8V nicht vorhanden
63	Unerwarteter Pegel auf POWER_FAIL (NMI-Leitung: z.B. Überschlag im Bildrohr oder zu niedrige Netzspannung)
64	XRP-Abgleich detektierte Überspannung (nur US-Versionen)
65	Schreiben in den XRP-NVM schlug fehl (nur US-Versionen)
66	Daten im XRP-NVM sind defekt (nur US-Versionen)
68	Geschaltete 5V nicht vorhanden (während POWER_SAFETY aktiv (=L) ist)
69	H/V-Synch für OSD fehlen
72	IX400 (CXA2151, Eingangsschalter AV4) antwortet nicht
93	Soft.problem: IR001 konnte Bustreiber für I2C-Bus_1 und II2C-Bus_2 nicht korrekt installieren
94	Soft.problem: IR001 konnte Bustreiber für I2C-Bus_3 und II2C-Bus_4 nicht korrekt installieren
95	Software problem: IR001 konnte Porttreiber für I2C-Busse nicht korrekt installieren
96	Software problem: IR001 konnte Treiber für den ADC nicht korrekt installieren
97	Software problem: IR001 konnte AV-Linktreiber nicht korrekt installieren
98	Software problem: IR001 konnte SDRAM-Timing nicht korrekt installieren
99	Watchdog-Timer im IR001 hat ausgelöst

ES

11	Línea Data I2C bus_1 forzada a nivel bajo
12	Línea Clock I2C bus_1 forzada a nivel bajo
13/95	Línea Data I2C bus_2 forzada a nivel bajo
14/95	Línea Clock I2C bus_2 forzada a nivel bajo
15	Línea Data I2C bus_3 forzada a nivel bajo
16	Línea Clock I2C bus_3 forzada a nivel bajo
17	Línea Data I2C bus_4 forzada a nivel bajo
18	Línea Clock I2C bus_4 forzada a nivel bajo
19	Detectado chasis inválido
25	El sintonizador principal no responde
26	El sintonizador secundario (PIP) no responde
27	IX300 (TEA6415C) no responde
28	IV300 (TA1360) no responde
29	Faltan los 9V de IV300
31	IV400 (TDA9330H) no responde
32	Faltan los 8V de IV400
33	Deflexión: Circuito seguridad ha detectado un problema (4/IV400) - BV500 no conectado
34	PHI2_REF no disponible
35	Problema en el bit NRF, IV400 TDA9330 (HOP) oscilador no bloqueado
36	TRC no caliente en el tiempo establecido
37	Falta V_GUARD
38	XPR Bit. IV400 (TDA9 3OH),seguridad de rayos X activada
39	Problema en PH1, IV400 TDA.9330 (HOP) oscilador no bloqueado a tiempo
41	IA001 (MSP) no responde
42	El bit del reset de IA001 (MSP) está activo
45	MSP averiado
46	La FI principal no responde
47	Faltan los 5V de FI
48	La FI del PIP no responde
49	Faltan los 5V de la FI PIP
51	IV100 (VSP9407) no responde
52	Faltan los 3V3 de Upconverter IV100
54	NVM IR005 (M24C64) no responde
55	IR006 (PCF8574) no responde
56	Problema en el bit FLS IV400 (TDA9330)
58	Código de validación fallido
59	IR001 montado, mal o incorrecto
61	Faltan los 5VON
62	Faltan los 5V y los 8V
63	Nivel inesperado en la línea NMI
64	Sobretensión en el ajuste XRP (rayos X)
65	La escritura a la NVM ha fallado
66	El contenido de la NVM está corrupto
68	Faltan los 5V conmutados
69	Faltan los sincronismos H/V para el OSD
72	IX400 (CXA2151) no responde
93	IR001, Err_I2C Bus_1 y Err_I2C Bus_2 (Bus drivers)
94	IR001, Err_I2C Bus_3 y Err_I2C Bus_4 (Bus drivers)
95	IR001, Err_I2C, Puerto del driver no se puede instalar
96	IR001, driver para ADC no se puede instalar
97	IR001, driver para AV-link no se puede instalar
98	SDRAM (IR110) problemas con el timing
99	IR001 alcanzado Watchdog

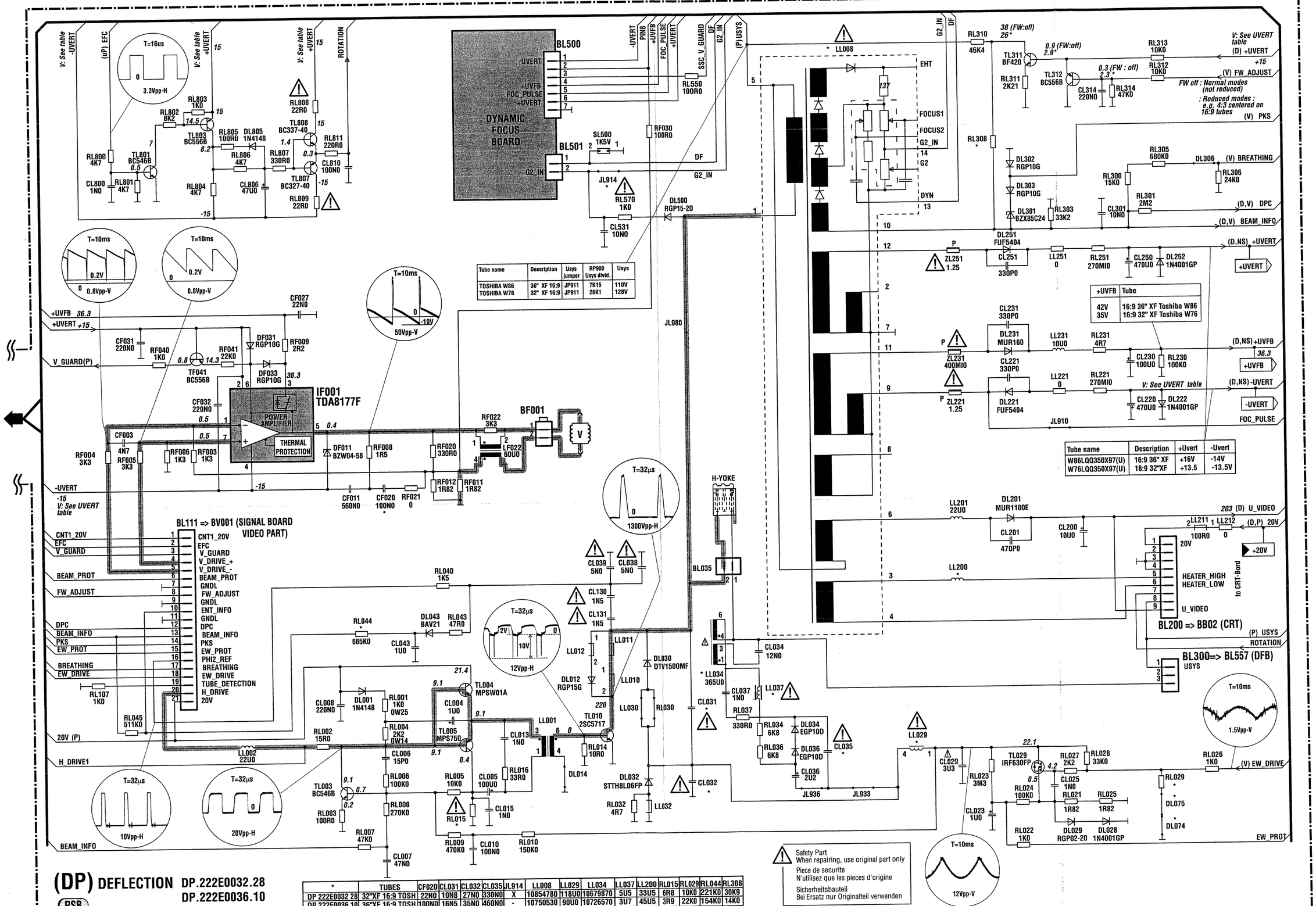
POWER / SCAN BOARD - PLATINE ALIMENTATION / BALAYAGE - NETZTEIL- UND ABLENKPLATINE - PIASTRA DEFLESSIONE / ALIMENTAZIONE - PLACA ALIMENTACIÓN / BARRIDOS
POWER SUPPLY PART - PARTIE ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN



Tube name	Description	Usys jumper	RP900 Usys divid.	Usys
TOSHIBA W86	36" XF 16:9	JP911	7K15	110V
TOSHIBA W76	32" XF 16:9	JP911	26K1	128V

Reference	Description	JP902	LP050	RP015	RP016	RP120
PP 222E0000 10	Std.Power DTV 36" version	-	10857580	5R0	5R0	WIRE
PP 222E0000 30	Std.Power DTV 32" XF tube	-	10830410	9R0	9R0	4K7 0W43
PP 222E0000 37	Std.Power PTV 32" version	X	10830410	18R0	-	4K7 0W42
PP 222E0001 30	Std.Power DTV 32" TFT	-	10830410	5R0	5R0	4K7 0W43

POWER / SCAN BOARD - PLATINE ALIMENTATION / BALAYAGE - NETZTEIL- UND ABLENKPLATINE - PIASTRA DEFLESSIONE / ALIMENTAZIONE - PLACA ALIMENTACIÓN / BARRIDOS SCANNING - BALAYAGE - ABLENKUNG - BARRIDO - SCANSIONE



Tube name	Description	Usys jumper	RP900 Usys divid.	Usys
TOSHIBA W86	36" XF 16:9	JP911	7K15	110V
TOSHIBA W76	32" XF 16:9	JP911	26K1	128V

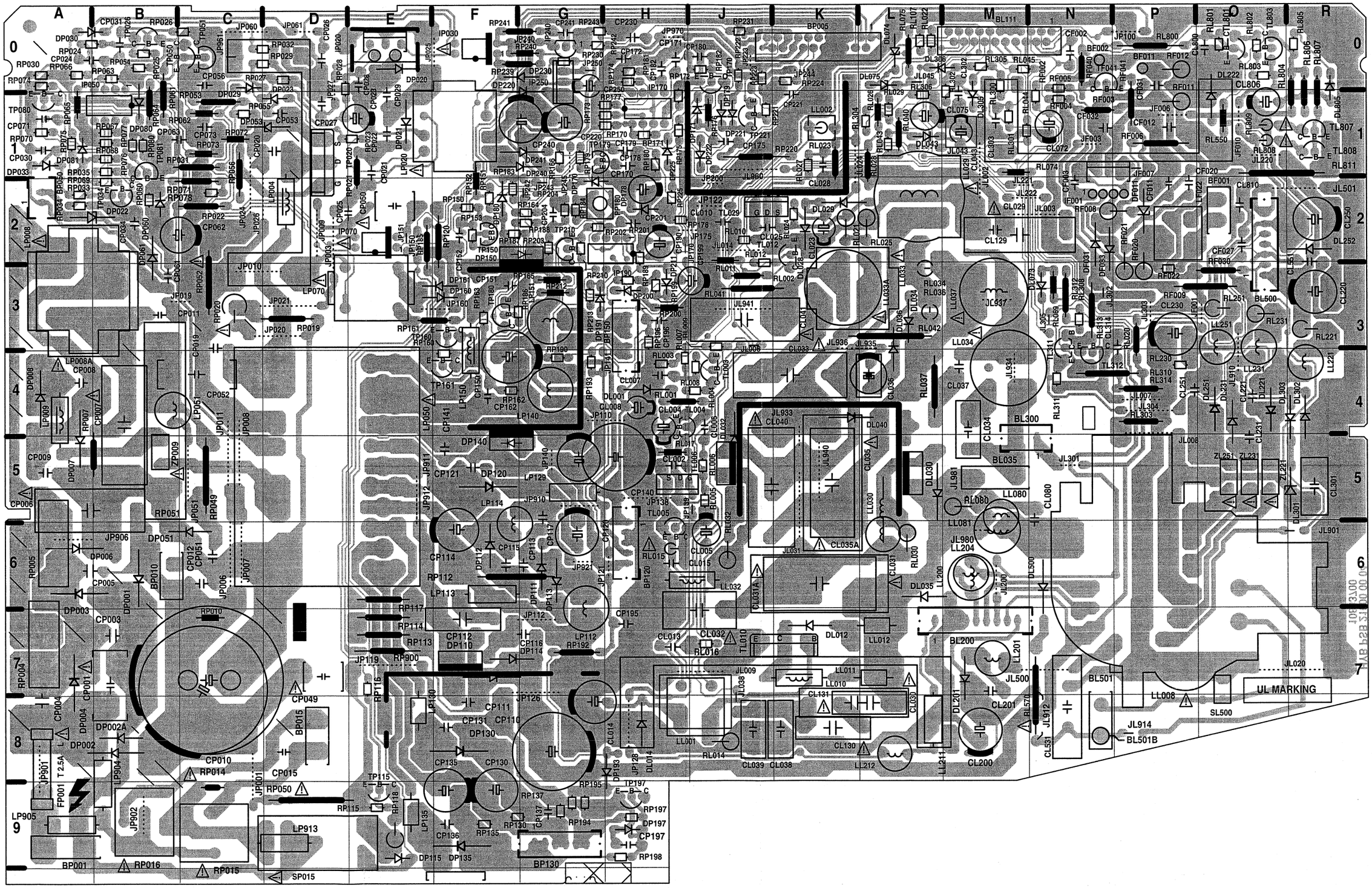
+UVFB	Tube
42V	16:9 36" XF Toshiba W86
35V	16:9 32" XF Toshiba W76

Tube name	Description	+Uvert	-Uvert
W86LQQ350X97(U)	16:9 36" XF	+16V	-14V
W76LQQ350X97(U)	16:9 32"XF	+13.5	-13.5V

*	TUBES	CF020	CL031	CL032	CL035	JL914	LL008	LL029	LL034	LL037	LL200	RL015	RL029	RL044	RL308
DP 222E0032 28	32"XF 16:9 TOSH	22N0	10N8	27N0	330N0	X	10854780	118U0	10679870	5U5	33U5	6R8	10K0	221K0	30K9
DP 222E0036 10	36"XF 16:9 TOSH	100N0	16N5	35N0	460N0	-	10750530	90U0	10726570	3U7	45U5	3R9	22K0	154K0	14K0

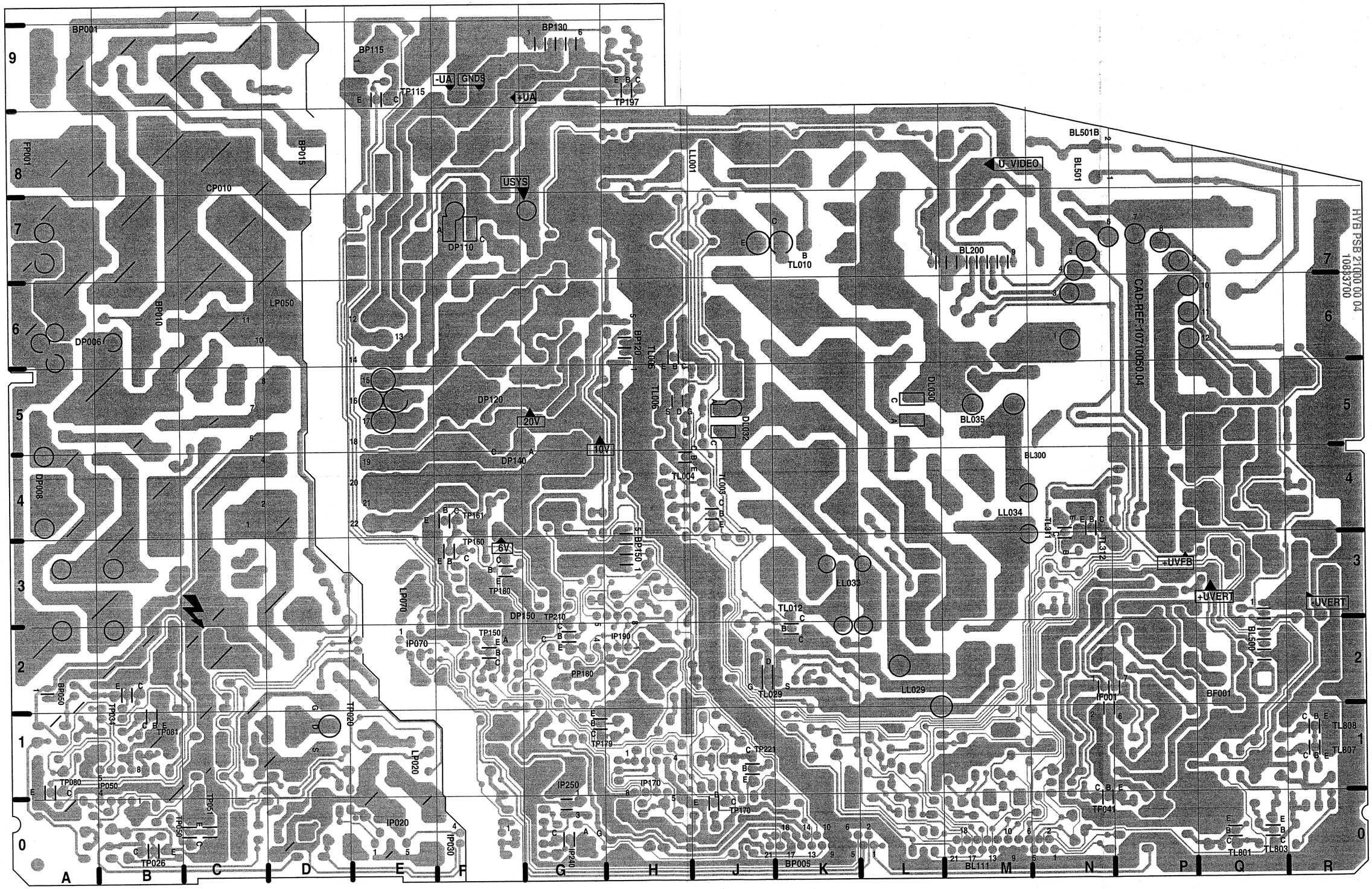
POWER / SCAN BOARD - PLATINE ALIMENTATION / BALAYAGE - NETZTEIL- UND ABLENKPLATINE - PIASTRA DEFLESSIONE / ALIMENTAZIONE - PLACA ALIMENTACIÓN / BARRIDOS

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



POWER / SCAN BOARD - PLATINE ALIMENTATION / BALAYAGE - NETZTEIL- UND ABLENKPLATINE - PIASTRA DEFLESSIONE / ALIMENTAZIONE - PLACA ALIMENTACIÓN / BARRIDOS

SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



COMPONENTS LOCATION - LOCALISATION DES ELEMENTS - LAGE DER BAUTEILE - LOCALIZZAZIONE DEGLI ELEMENTI - LOCALIZACION DE LOS COMPONENTES

POWER / SCAN BOARD - PLATINE ALIMENTATION / BALAYAGE - NETZTEIL- UND ABLENKPLATINE - PIASTRA DEFLESSIONE / ALIMENTAZIONE - PLACA ALIMENTACIÓN / BARRIDOS

1	2	3

BB001	KV
BB002	M9
BB003	PZ
BB004	N9
BB007	P9
BB009	N9
BB010	NV
BF001	Q2
BF002	N0
BF011	P0
BG003	R9
BJ004	FZ
BJ010	GV
BJ011	FV
BJ015	FV
BK101	DZ
BK102	CZ
BK103	EZ
BL035	M5
BL111	M0
BL200	M7
BL300	M5
BL500	Q2
BL501	N8
BP001	A9
BP005	K0
BP010	B6
BP015	D8
BP050	A2
BP120	H6
BP130	G9
BP150	H3
BQ009	JZ
BQ012	JV

CB001	QZ
CB003	M9
CB004	KV
CB005	LV
CB006	K9
CB079	M9
CF002	N0
CF003	N2
CF011	P2
CF012	P1
CF020	P1
CF027	Q2
CF031	P0
CF032	N1
CG001	Q8
CG002	RV
CG003	MZ
CG004	RZ
CG005	QV
CG006	QZ
CG007	QV
CG009	Q9
CG010	RZ
CG012	R8
CG031	MV
CG048	Q9
CG052	LZ
CG053	KZ
CG054	LZ
CJ003	GZ
CJ004	GZ
CK101	BV
CK102	BZ
CK103	DV
CL002	J5
CL004	H4
CL005	J6
CL006	J4
CL007	H4
CL008	H4
CL010	J2
CL013	H7
CL014	G8
CL015	J6
CL023	K2
CL025	K2
CL028	K1
CL029	M2
CL030	K8
CL031	K6
CL031A	K6
CL032	J7
CL033	K4
CL034	M4
CL035	K5
CL035A	K5
CL036	L4
CL036A	L4
CL037	M4
CL038	K8
CL039	J8
CL040	J5
CL041	J3
CL043	M1
CL072	N1
CL075	L1
CL080	N5
CL129	M2
CL130	K8
CL131	L8
CL200	M8
CL201	M7
CL220	R3
CL221	Q4
CL230	P3
CL231	Q5
CL250	R2
CL251	P4
CL301	R5
CL301A	R5
CL302	M0
CL303	M1
CL314	P4
CL531	N8
CL551	R2
CL800	Q0
CL806	Q1
CL810	Q2
CP001	B7
CP003	B7
CP004	A8
CP005	A6
CP006	A5
CP007	B4
CP008	A4
CP009	A5
CP010	C7
CP010A	C7
CP011	B3
CP012	C6
CP015	D8
CP019	C3
CP020	D1
CP021	E1
CP022	E1
CP023	E1
CP024	B0
CP025	E2
CP026	D0
CP027	D1
CP028	E0
CP029	E1
CP030	A1
CP031	B0
CP034	B2
CP049	D7
CP050	E2
CP051	C6
CP052	C4
CP053	D1
CP056	C0
CP061	B2
CP062	C2
CP063	B1
CP071	A1
CP073	C1
CP110	G8
CP111	F8
CP112	F7
CP113	G6
CP114	F6
CP115	F6
CP116	G7
CP117	G5
CP120	G6
CP121	F5
CP130	F9
CP131	F8
CP135	F9
CP136	F9
CP137	G9
CP140	H5
CP140A	G5
CP141	F5
CP150	F4
CP151	F3
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CP170	H2
CP171	H0
CP172	H0
CP175	J1
CP178	H1
CP179	H1
CP180	H0
CP182	H0
CP190	H2
CP195	H7
CP196	H3
CP197	H9
CP199	J3
CP201	H2
CP204	G2
CP220	G1
CP221	J1
CP230	H0
CP240	G1
CP241	G0
CP250	G0
CQ003	HZ
CQ004	HZ

DB004	L9
DB006	K9
DB007	J9
DB030	L9
DB031	MV
DB050	LV
DB051	LV
DB070	L9
DB071	MV
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DF031	N3
DF033	N2
DG001	Q8
DG002	R9
DG003	QV
DG004	QV
DG026	P9
DL001	G4
DL012	L7
DL014	H8
DL028	K2
DL029	L2
DL030	L5
DL030A	L4
DL030X	K5
DL032	J5
DL032A	J5
DL034	L3
DL035	M6
DL036	L4
DL040	K4
DL043	L1
DL073	N3
DL074	L0
DL075	K0
DL201	M7
DL221	Q4
DL221A	Q4
DL222	Q1
DL231	Q5
DL251	Q4
DL251A	Q5
DL252	R2
DL301	R6
DL302	R5
DL303	R4
DL305	M1
DL306	L0
DL500	N5
DL805	R0
DP001	B5
DP001A	B6
DP002	C8
DP002A	B8
DP003	B6
DP003A	B6
DP004	A8
DP004A	A8
DP006	A6
DP007	A4
DP008	A5
DP020	E0
DP021	E0
DP022	A2
DP023	D1
DP029	C0
DP030	B0
DP033	A1
DP051	C6
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DP060	B2
DP061	B3
DP080	B1
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DP111	G7
DP112	F6
DP113	G6
DP114	F7
DP115	E9
DP120	E5
DP120A	F5
DP130	E8
DP130A	E8
DP135	G9
DP135A	F9
DP140	F5
DP150	G2
DP150B	G3
DP160	F3
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DP170	G2
DP171	J1
DP178	H2
DP179	J1
DP180	F2
DP191	G3
DP193	H8
DP197	H9
DP200	H3
DP211	H3
DP220	F1
DP221	J1
DP222	J1
DP225	H1
DP230	G0
DP240	F1
DP241	F1

FIX10	D3
FIXA01	N4
FIXA02	D7
FP001	A8

GE101	AV
GK101	BV

IB001	KV
IB001A	LV
IF001	N2
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IP020	E0
IP020A	E0
IP030	F0
IP050	B1
IP070	E2
IP170	H1
IP190	H2
IP240	G0
IP250	G0

JB009	N9
JE101	BZ
JE102	AZ
JE103	AZ
JF001	Q3
JF003	N1
JF006	P1
JF007	P1
JF010	Q1
JJ001	FV
JJ015	FV
JL002	M1
JL003	N2
JL006	J3
JL007	P4
JL008	P4
JL009	J7
JL014	J2
JL020	R7
JL024	K1
JL031	K5
JL038	J8
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JL045	L0
JL200	M6
JL220	Q1
JL221	M2
JL222	M2
JL301	N5
JL302	N3
JL303	P3
JL304	P4
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JL500	N7
JL501	R2
JL901	R6
JL910	Q4
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JL936	K3
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JP001	C8
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JP011	C5
JP019	C3
JP020	D3
JP021	D3
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JP027	D0
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JP060	C0
JP061	D0
JP100	P0
JP110	H4
JP112	G7
JP119	E7
JP121	H6
JP122	J2
JP126	G7
JP128	H8
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JP139	J5
JP140	G5
JP141	G4
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JP151	E2
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JP175	H2
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JP243	G2
JP244	K0
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JP902	B9
JP906	A6
JP910	G5
JP911	E5
JP912	E5
JP921	G6
JP961	C0
JP970	H0

LB006	L9
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LG001	RV
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LL034	M4
LL037	M3
LL080	M5
LL081	M6
LL200	M6
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LL221	R4
LL231	Q3
LL251	Q3
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LP009	A4
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LP151	G3
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LP905	A9
LP913	D9

PP180	G2

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RB002	M9
RB004	NV
RB005	L9
RB007	K9
RB011	KV
RB021	KZ
RB031	MZ
RB032	LV
RB041	LV
RB051	MZ
RB052	LV
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RB079	L9
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RG027	Q9
RG029	Q9
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RG041	QZ
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RK104	DV
RK105	BZ
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RL030	L6
RL032	J6
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RL040	L1
RL041	H3
RL042	L3
RL043	L1
RL044	M1
RL045	M0
RL069	N3
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RL075	L0
RL080	L5
RL107	L0
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RL251	Q3
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RL803	Q0
RL804	R1
RL805	R0
RL806	R1
RL807	R1
RL808	R1
RL809	R1
RL811	Q1
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RP005	A6
RP007	B5
RP010	C7
RP014	C9
RP015	C9
RP016	B9
RP019	D3
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RP021	E1
RP022	C2
RP023	E1
RP024	B0
RP025	B0
RP026	C0
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RP029	D0
RP030	A0
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RP032	D0
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RP035	B1
RP049	C5
RP050	E9
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RP052	C3
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RP056	C1
RP060	B2
RP061	B1
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RP067	B1
RP068	B1
RP069	B2
RP070	A1
RP071	C2
RP072	C1
RP073	C1
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RP078	C2
RP080	B1
RP112	F6
RP113	E7
RP114	E7
RP115	E9
RP116	E7
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RP163	F3
RP164	G2
RP165	G3
RP166	G1
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RP171	H1
RP172	H1
RP173	H1
RP174	H0
RP175	H1
RP176	J1
RP177	H1
RP178	H2
RP179	G1
RP180	H1
RP181	H0
RP182	J0
RP183	F2
RP184	G2
RP185	E2
RP186	G3
RP187	F2
RP188	G2
RP189	H3
RP190	G4
RP192	G7
RP193	G4
RP194	G9
RP195	G9
RP196	H3
RP197	H9
RP198	H9
RP199	H3
RP200	H3
RP201	H2
RP202	G2
RP203	G2
RP204	G2
RP210	G2
RP212	G3
RP213	G3
RP220	J1
RP221	J1
RP222	J0
RP223	J0
RP224	K0
RP225	H2
RP230	G0
RP231	J0
RP239	G0
RP240	G0
RP241	G0
RP242	G0
RP243	G0
RP900	E7
RQ005	HZ
RQ006	JZ

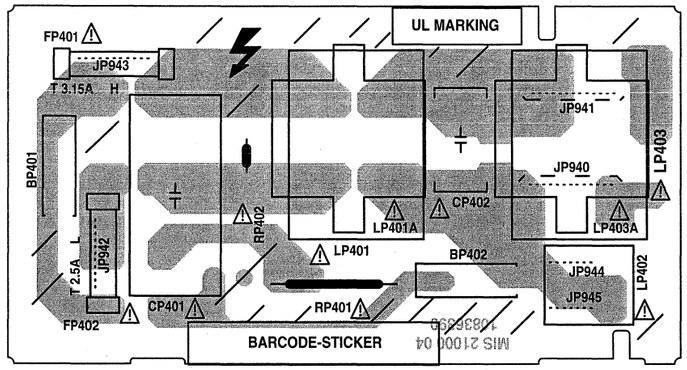
SK101	EV
SK102	DV
SK103	DV
SK104	CV
SL500	Q7
SP015	D9

TB001	K9
TF041	N0
TG001	QZ
TG002	QZ
TG003	QV
TG006	RV
TG007	R9
TG011	MZ
TG060	RV
TG070	R9
TL003	J4
TL004	H4
TL006	H5
TL010	K7
TL012	K2
TL028A	J1
TL029	J2
TL030A	K8
TL311	N3
TL312	N4
TL801	Q0
TL803	Q0
TL807	R1
TL808	R1
TP020	D1
TP020A	D1
TP026	B0
TP034	B2
TP050	C0
TP051	C0
TP080	A1
TP081	B1
TP115	E9
TP150	F2
TP160	F3
TP161	F4
TP170	J0
TP179	G1
TP180	F3
TP197	H9
TP210	G2
TP221	J1

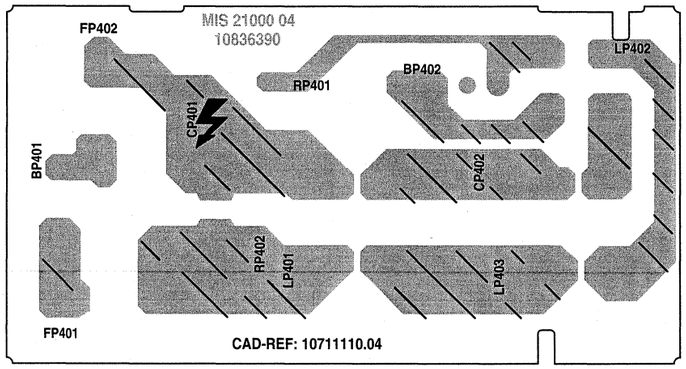
ZL221	Q5
ZL231	Q5
ZL251	Q5
ZP009	B5

MAINS FILTER - FILTRE SECTEUR
MIS222E0000

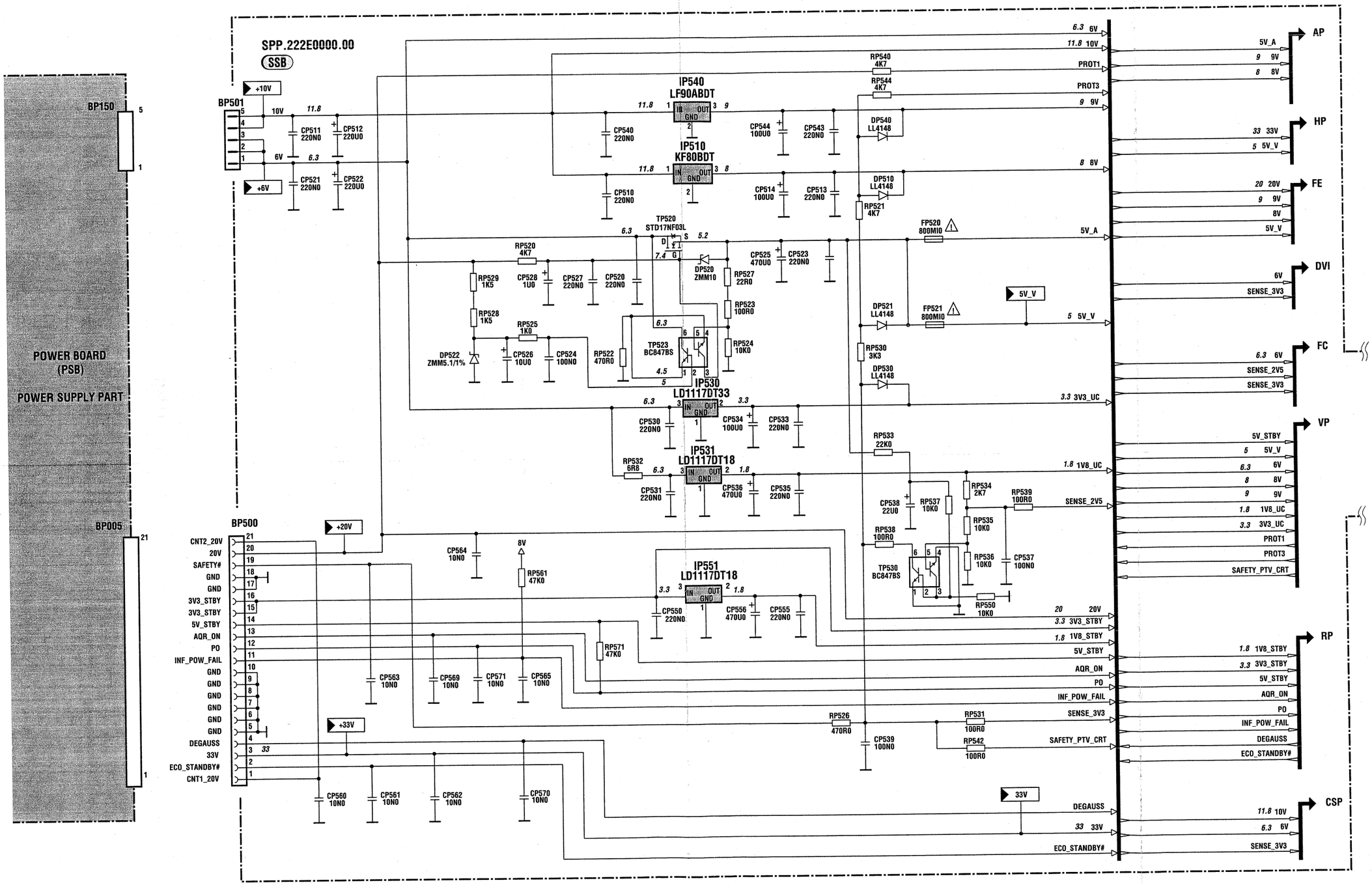
COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



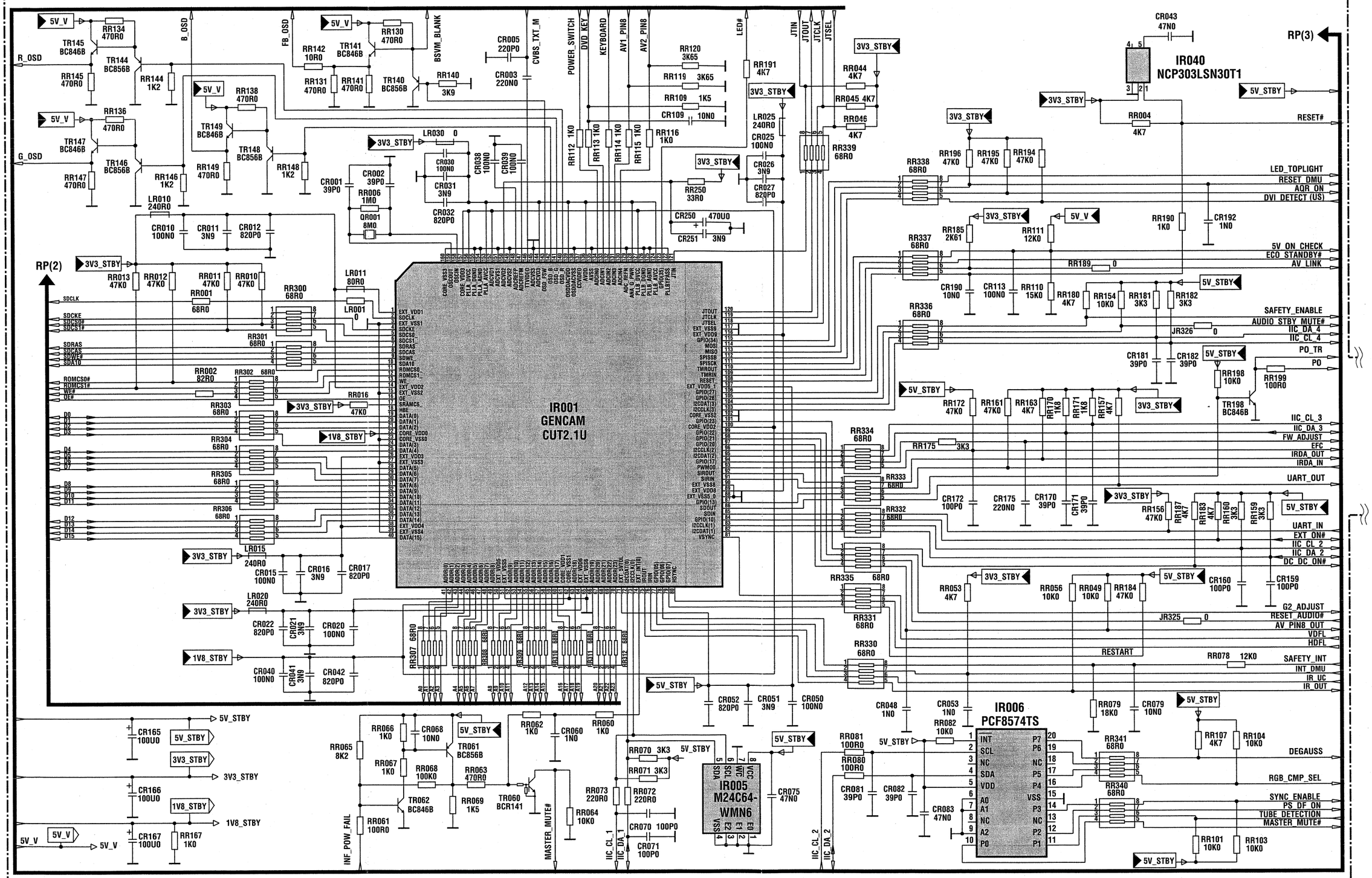
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
SIGNAL BOARD POWER PART - PARTIE ALIMENTATION DE LA PLATINE PETITES SIGNAUX - BETRIEBSSPANNUNGSERZEUGUNG SIGNAL PLATINE - PARTE ALIMENTAZIOEN PIASTRA SEGNALI - PARTE ALIMENTACIÓN PLACA SEÑAL

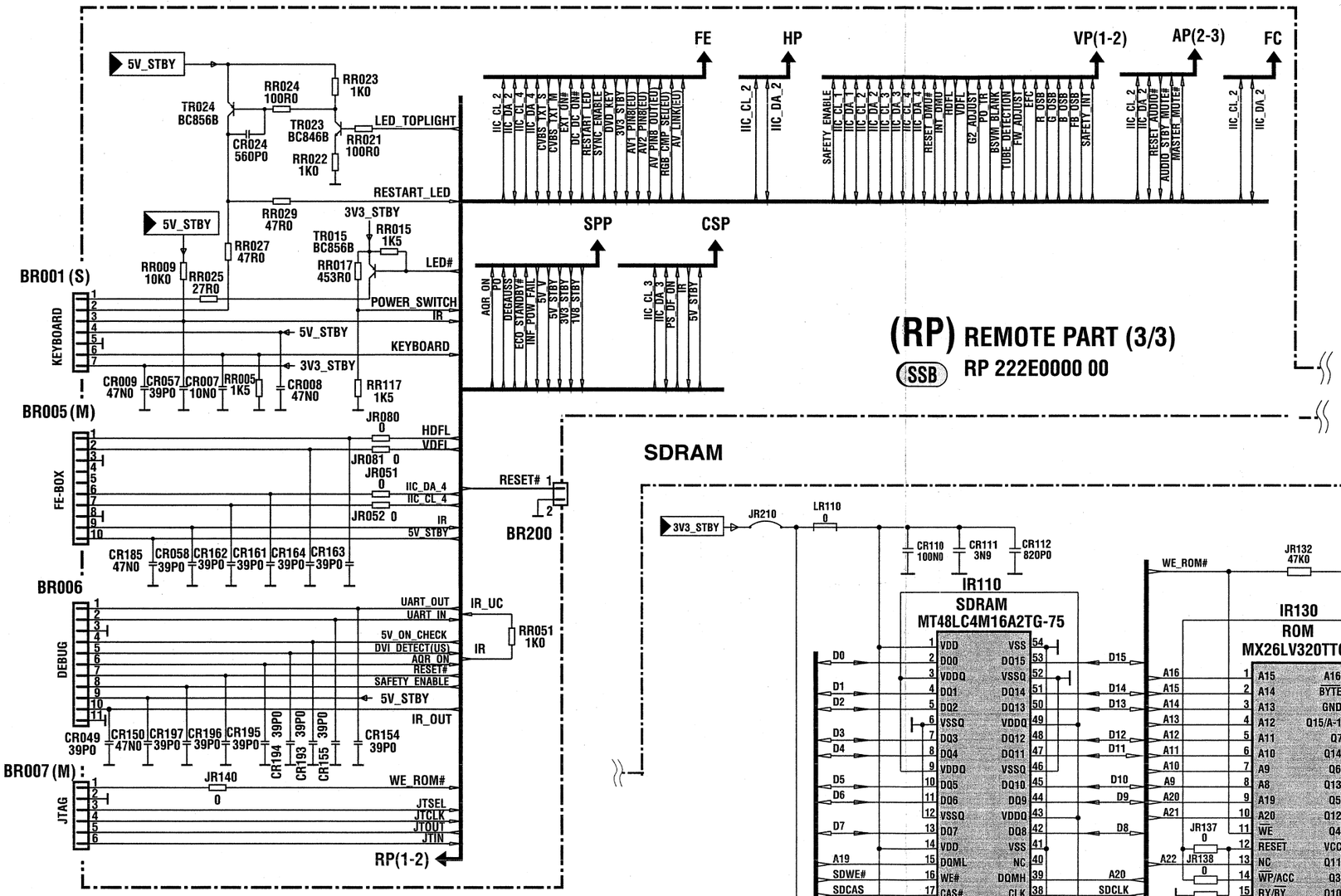


SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
REMOTE / MICROCONTROLLER - GESTION / MICROCONTROLEUR - FERNBEDIENUNGS- UND MICROCONTROLLERSTUFEN - MICROPROCESSORE - REMOTO / MICROCONTROLADOR

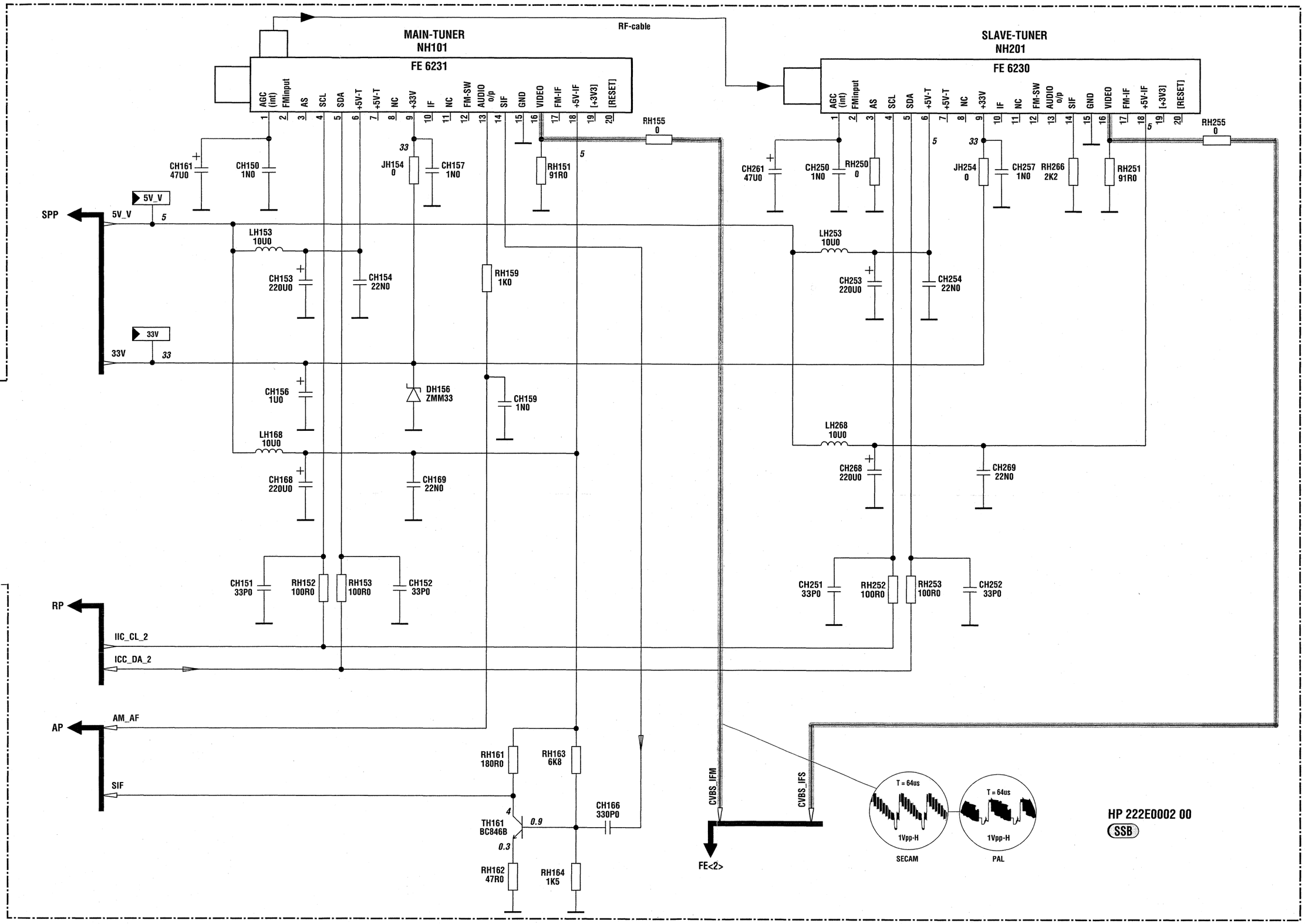


(RP) REMOTE PART (1/3)

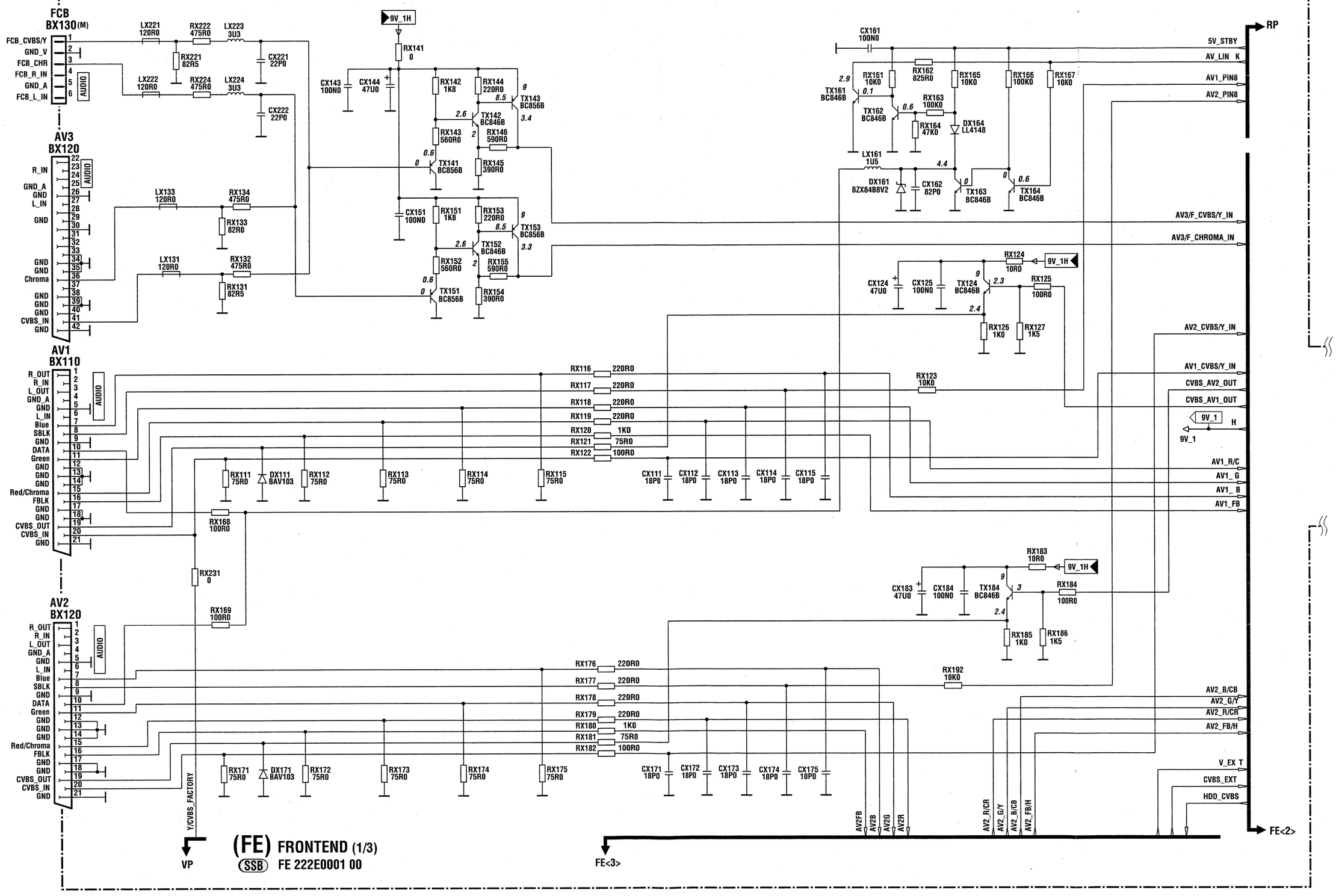
SSB **RP 222E0000 00**


5V_STBY
RR024 100R0
RR023 1K0
TR024 BC856B
TR023 BC846B
LED_TOPLIGHT
CR024 560P0
RR021 100R0
RR022 1K0
RESTART_LED
RR029 47R0
3V3_STBY
RR015 1K5
TR015 BC856B
RR027 47R0
RR009 10K0
RR025 27R0
RR017 453R0
LED#
BR001 (S)
KEYBOARD
POWER_SWITCH
IR
5V_STBY
KEYBOARD
3V3_STBY
CR009 47N0
CR057 39P0
CR007 10N0
RR005 1K5
CR008 47N0
RR117 1K5
BR005 (M)
JR080 0
HDFL
VDFL
JR081 0
JR051 0
IIC_DA_4
IIC_CL_4
JR052 0
IR
5V_STBY
FE-BOX
CR185 47N0
CR058 39P0
CR162 39P0
CR161 39P0
CR164 39P0
CR163 39P0
BR006
UART_OUT
UART_IN
5V_ON_CHECK
DVI_DETECT(US)
AQR_ON
RESET#
SAFETY_ENABLE
5V_STBY
IR_OUT
DEBUG
IR_UC
IR
RR051 1K0
CR049 39P0
CR150 47N0
CR197 39P0
CR196 39P0
CR195 39P0
CR194 39P0
CR193 39P0
CR155 39P0
CR154 39P0
BR007 (M)
JR140 0
WE_ROM#
JTAG
JTSEL
JTCLK
JTOUT
JTIN
RP(1-2)
FE
HP
VP(1-2)
AP(2-3)
FC
IIC_CL_2
IIC_DA_2
IIC_CL_4
IIC_DA_4
CVBS_TXT_S
CVBS_TXT_W
EXT_ONF
DIC_IDC_ONF
RESTART_ECO
SYNC_ENABLE
3V3_STBY
AV1_PINB(EU)
AV2_PINB(EU)
AV_PINB_OUT(EU)
RGB_CMP_SEL(EU)
AV_LINK(EU)
IIC_CL_2
IIC_DA_2
SAFETY_ENABLE
IIC_CL_1
IIC_DA_1
IIC_CL_2
IIC_DA_2
IIC_CL_3
IIC_DA_3
IIC_CL_4
IIC_DA_4
RESET_DMO#
INT_DMO
HDFL
VDFL
G2_ADJUST
PD_TR
BSVM_BLANK
TOBE_DETECTION
FW_ADJUST
EFC
R_OSB
G_OSB
B_OSB
FB_OSB
SAFETY_INT
IIC_CL_2
IIC_DA_2
RESET_AUDIO#
AUDIO_STBY_MUTE#
MASTER_MUTE#
IIC_CL_2
IIC_DA_2
SPP
CSP
AQR_ON
PO
DEGAUSS
ECO_STANDBY#
INF_POW_FAIL
5V_V
5V_STBY
3V3_STBY
1V8_STBY
IIC_CL_3
IIC_DA_3
PS_OF_ON
IR
5V_STBY
(RP) REMOTE PART (3/3)
SSB RP 222E0000 00
RESET# 1
2
BR200
SDRAM
3V3_STBY
JR210
LR110 0
CR110 100N0
CR111 3N9
CR112 820P0
IR110
SDRAM
MT48LC4M16A2TG-75
VDD VSS
DQ0 DQ15
VDDQ VSSQ
DQ1 DQ14
DQ2 DQ13
VSSQ VDDQ
DQ3 DQ12
DQ4 DQ11
VDDQ VSSQ
DQ5 DQ10
DQ6 DQ9
VSSQ VDDQ
DQ7 DQ8
VDD VSS
DQML NC
WE# DQMH
CAS# CLK
RAS# CKE
CS# NC
BA0 A11
BA1 A9
A10 A8
A0 A7
A1 A6
A2 A5
A3 A4
VDD VSS
D0 D1 D2 D3 D4 D5 D6 D7
D15 D14 D13 D12 D11 D10 D9 D8
A19 SDWE# SDCAS SDRAS SDCS0# A21 A22 SDA10 A0 A1 A2 A3
A20 SDCLK SDCKE A11 A9 A8 A7 A6 A5 A4
LR115 0
CR115 100N0
CR116 3N9
CR117 820P0
WE_ROM#
JR132 47K0
IR130
ROM
MX26LV320TTC-90
3V3_ROM
A15 A14 A13 A12 A11 A10 A9 A8 A20 A21 A16 A15 A14 A13 A12 A11 A10 A9 A8 A7 A6 A5 A4 A3 A2
A16 BYTE GND Q15/A-1 Q7 Q14 Q6 Q13 Q5 Q12 Q4 VCC Q11 Q3 Q10 Q2 Q9 Q1 Q8 Q0 OE GND CE A0
A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 A13 A14 A15 A16 A17 A18 A19 A22
JR137 0
JR138 0
CR137 330R0
A17
OE#
ROMCS0#
A1
RR316 68R0
RR315 68R0
RR314 68R0
RR313 68R0
D15_ D14_ D13_ D12_ D7_ D6_ D5_ D4_ D11_ D3_ D10_ D2_ D9_ D1_ D8_ D0_
3V3_STBY
LR130 240R0
3V3_ROM
CR130 100N0
CR131 3N9
CR132 820P0
(RP) REMOTE PART (2/3)
SSB RP 222E0000 00
RP(1)

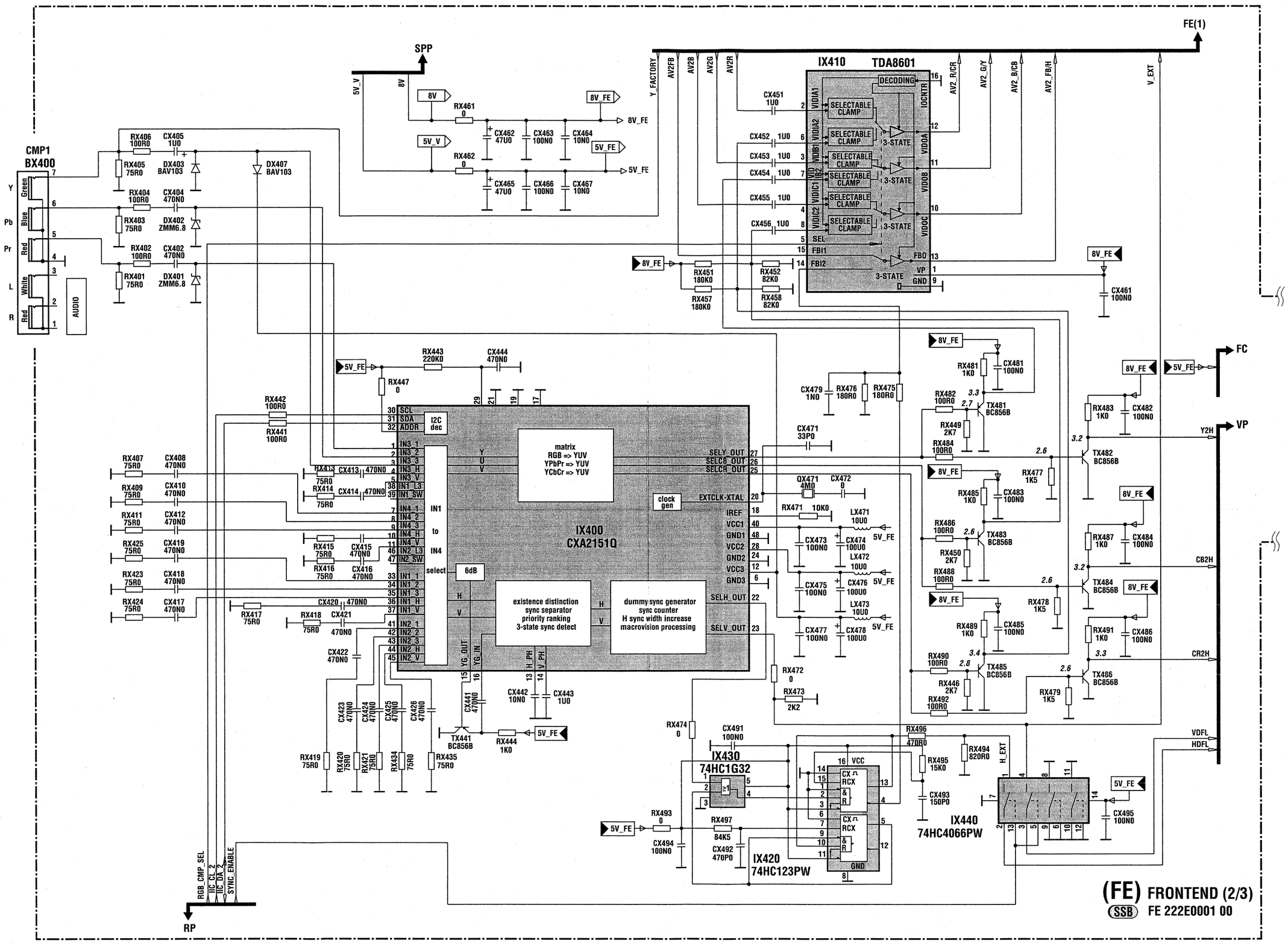
SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
HF PART TUNER



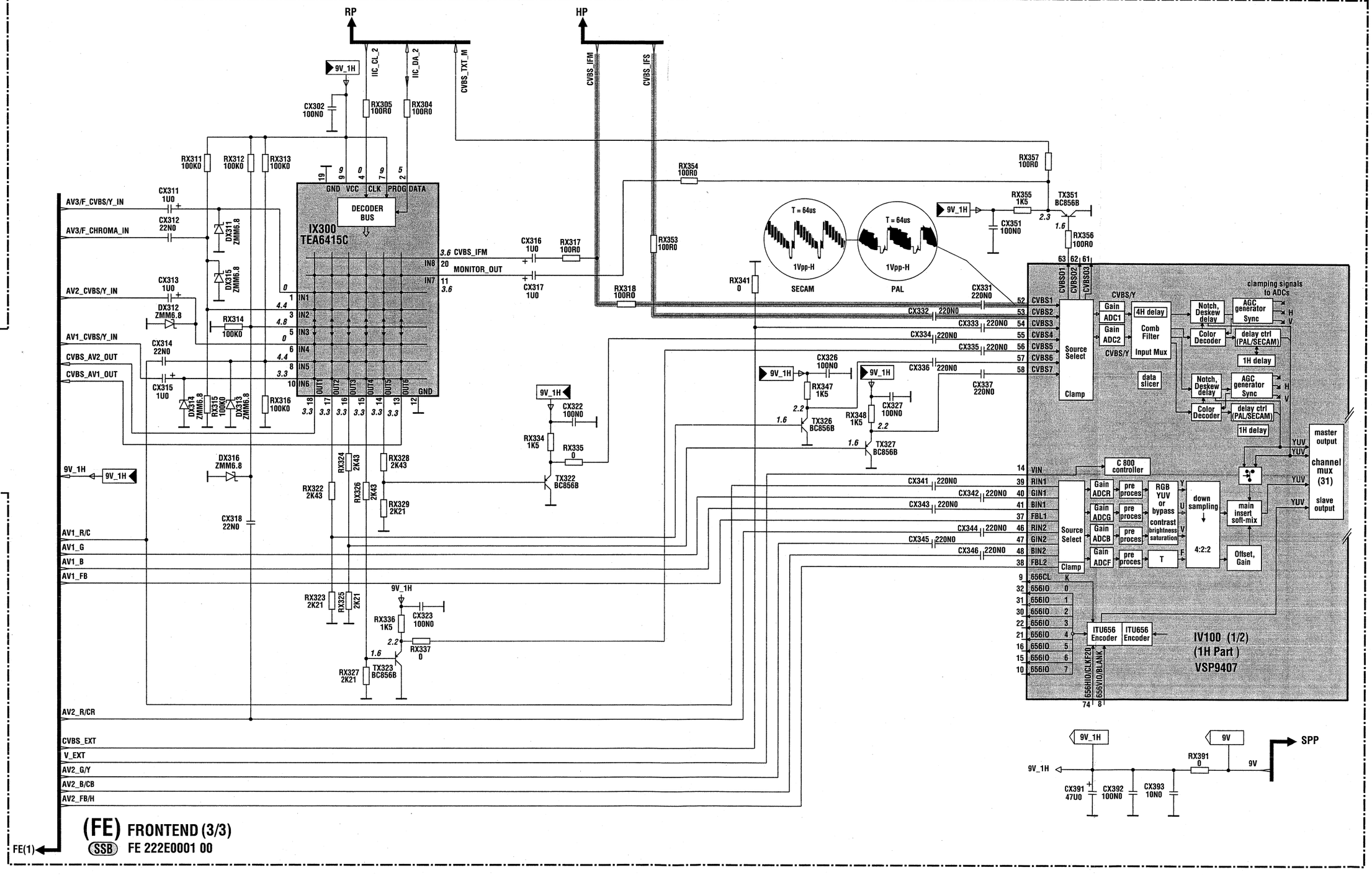
SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
FRONTEND PART (1/3) - PARTIE SIGNAUX D'ENTREE (1/3) - EINGANGSSTUFEN (1/3) - PRESE FRONTALI (1/3) - FRONT END PART (1/3)



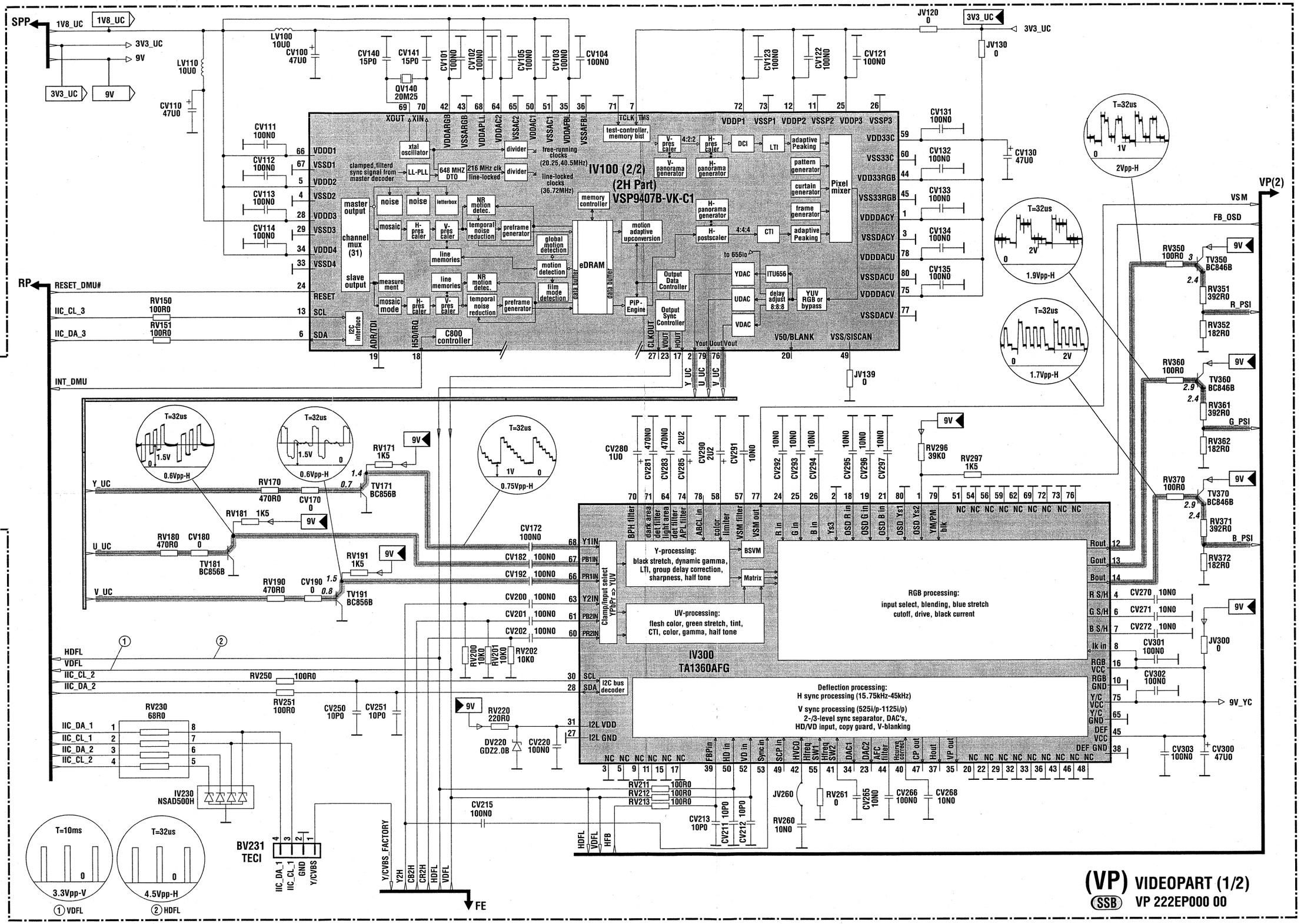
SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
FRONTEND PART (2/3) - PARTIE SIGNAUX D'ENTREE (2/3) - EINGANGSSTUFEN (2/3) - PRESE FRONTALI (2/3) - FRONT END PART (2/3)



SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
FRONTEND PART (3/3) - PARTIE SIGNAUX D'ENTREE (3/3) - EINGANGSSTUFEN (3/3) - PRESE FRONTALI (3/3) - FRONT END PART (3/3)

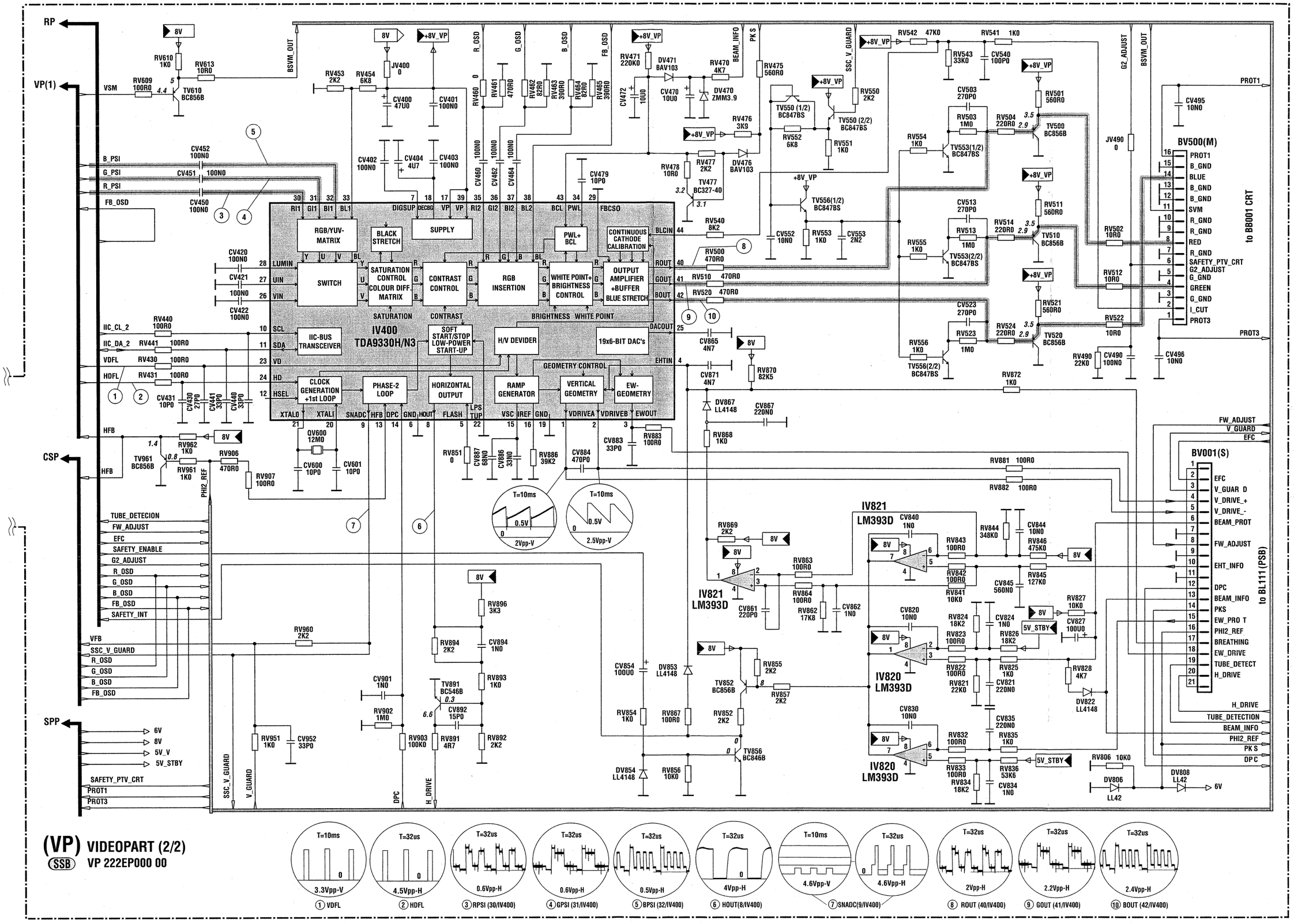


SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
VIDEO PART (1/2) - PARTIE VIDEO (1/2) - VIDEO-SIGNALVERARBEITUNG (1/2) - ELABORAZIONE VIDEO (1/2) - TRATAMENTO VIDEO (1/2)

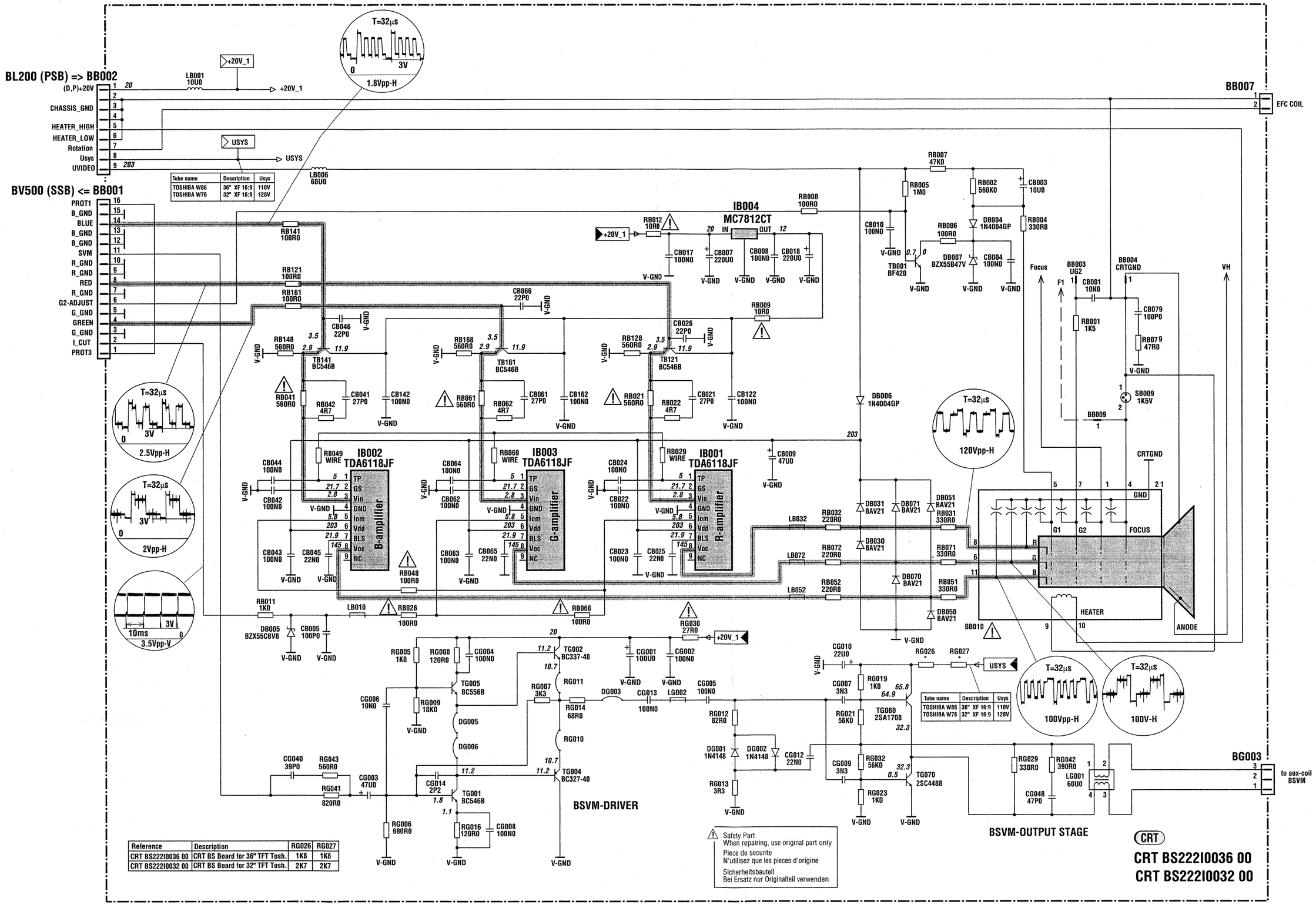


(VP) VIDEOPART (1/2)
(SSB) VP 222EP000 00

SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
VIDEO PART (2/2) - PARTIE VIDEO (2/2) - VIDEO-SIGNALVERARBEITUNG (2/2) - ELABORAZIONE VIDEO (2/2) - TRATAMENTO VIDEO (2/2)

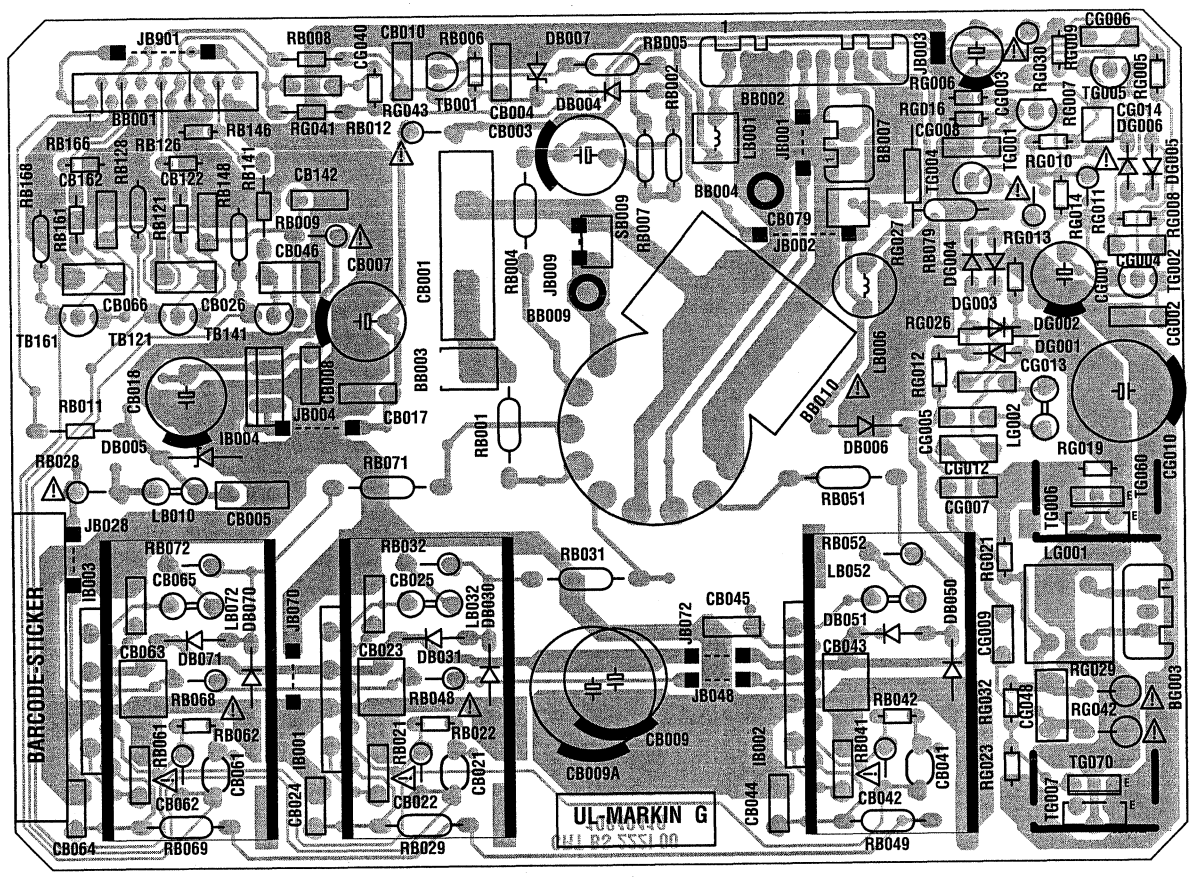


VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE - PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO

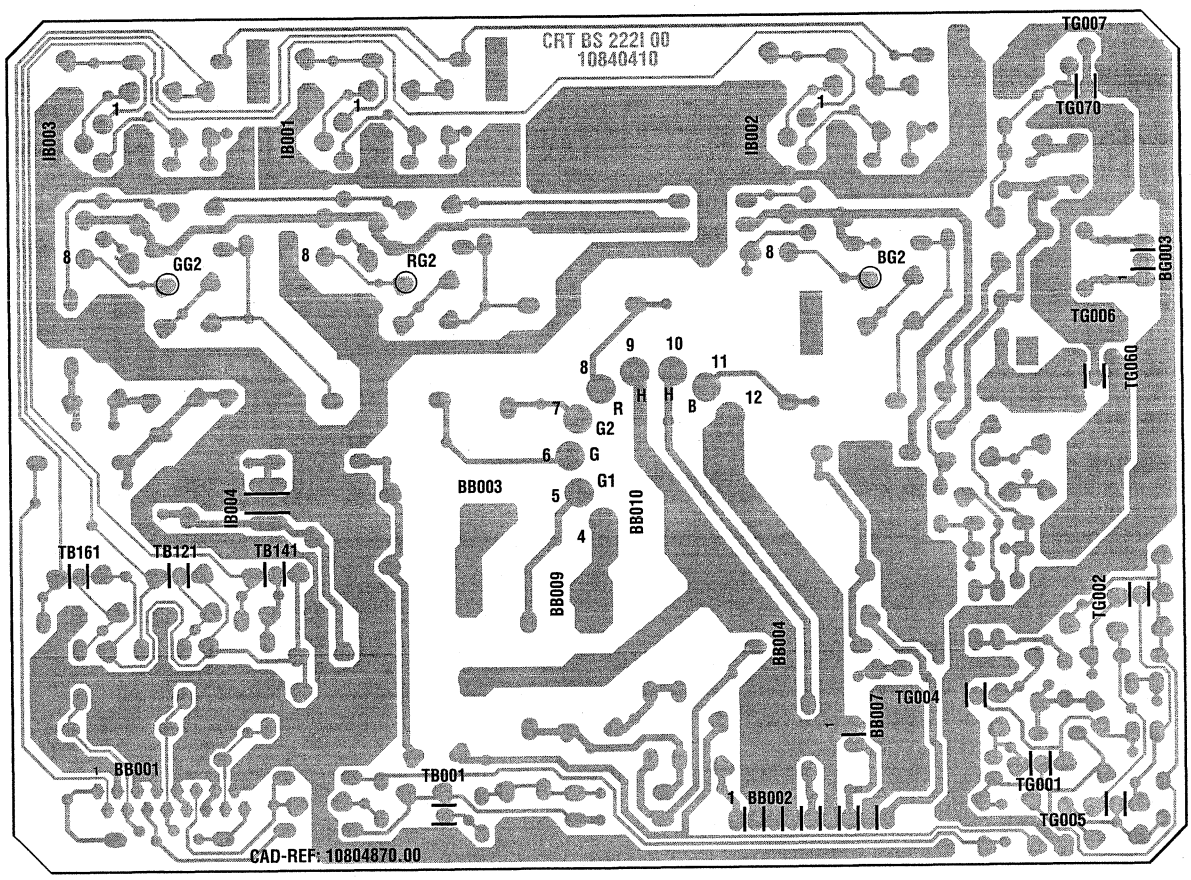


VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE - PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



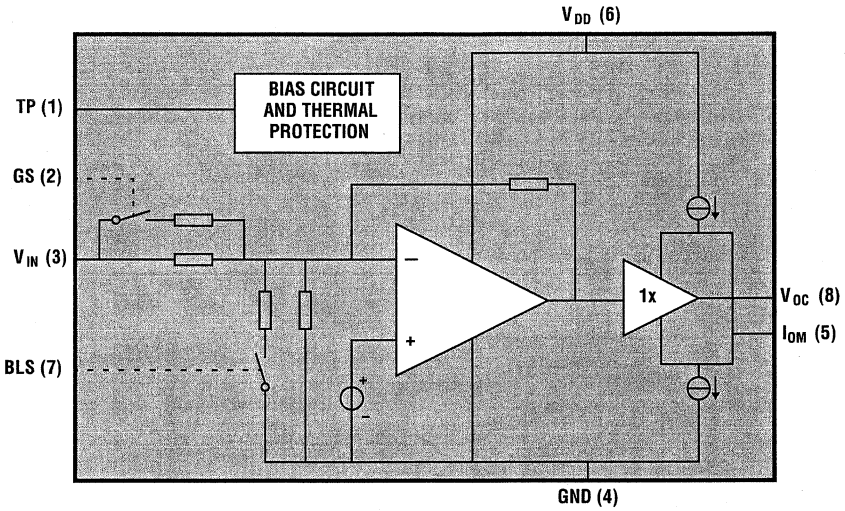
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



INTEGRATED CIRCUITS BLOCK DIAGRAMS - SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES - INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBILDER - SCHEMA A BLOCCHI DEL CIRCUITI INTEGRATI - VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS

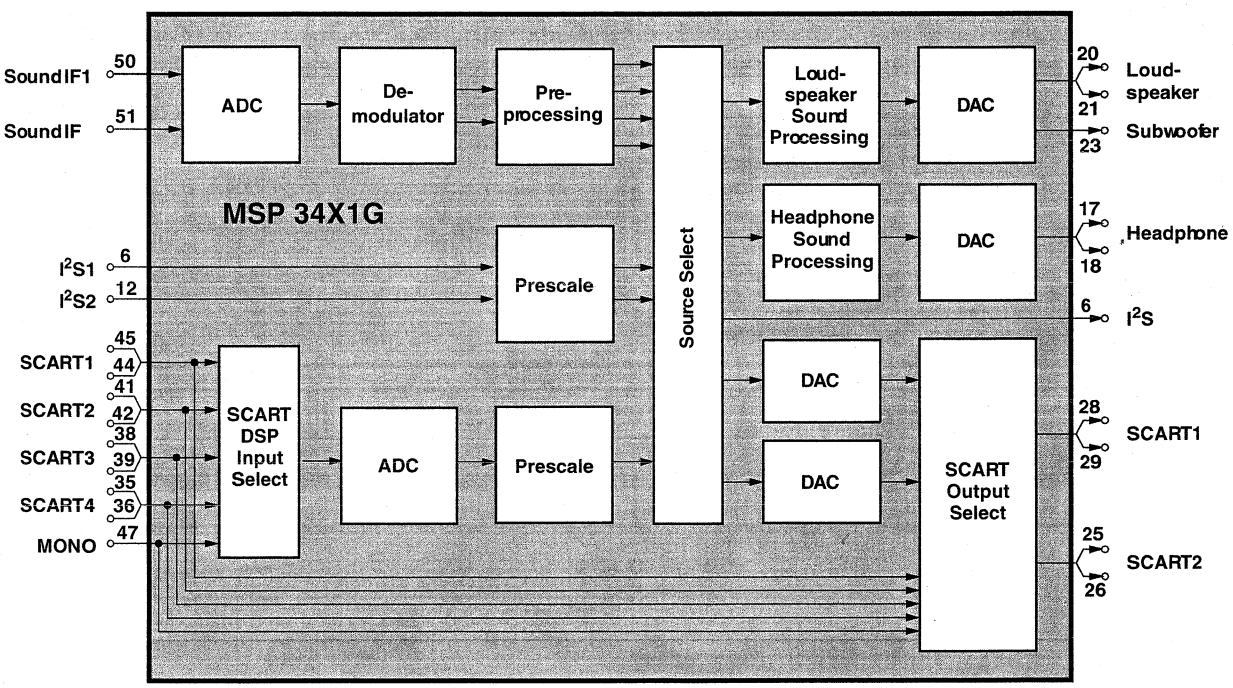
VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE - PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO

IB001 - IB002 - IB003 - TDA6118JF

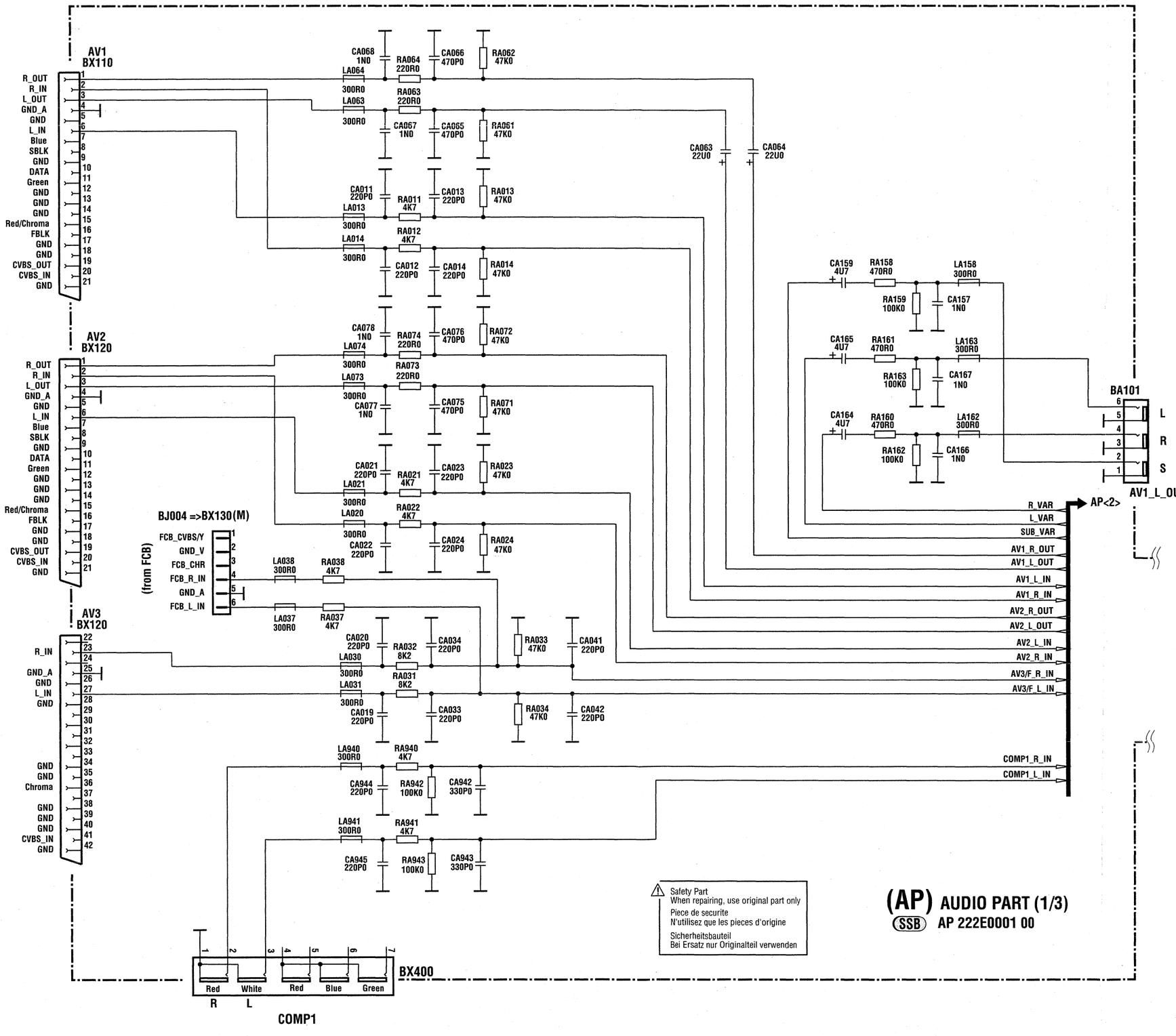


AUDIO PART - PARTIE AUDIO - AUDIOSTUFEN - CIRCUITO AUDIO - AUDIO

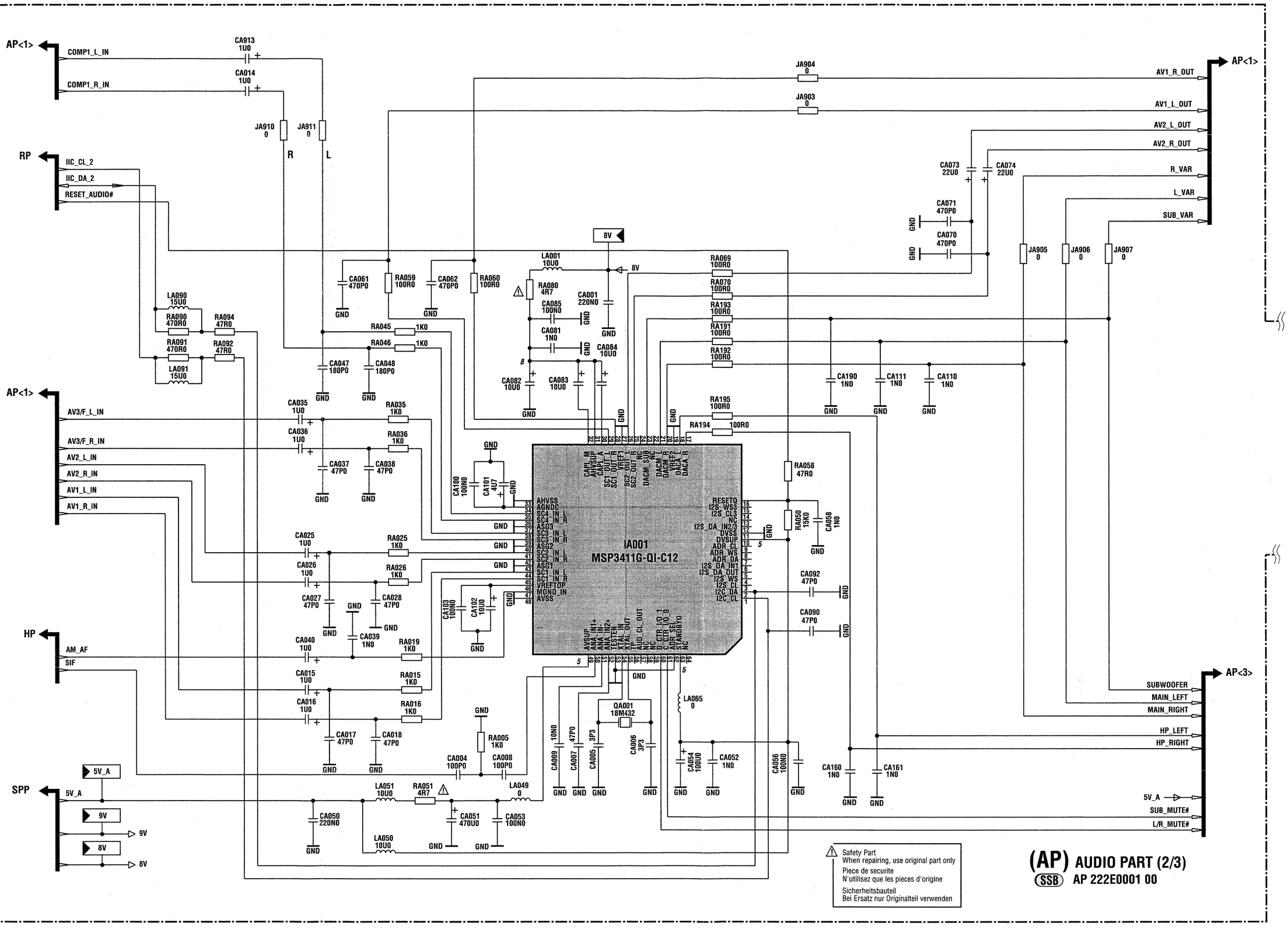
IA001- MSP34X0 / X1G



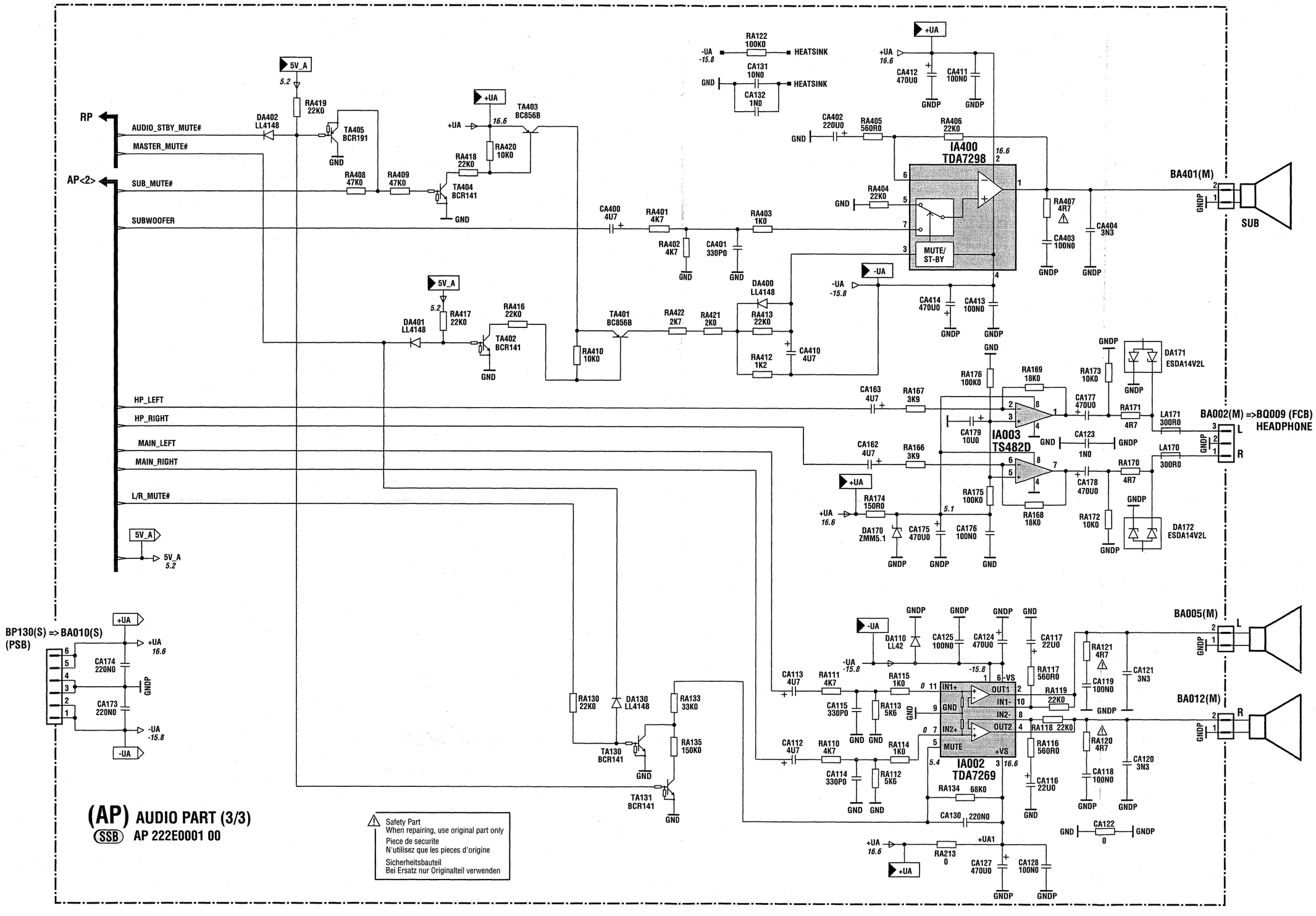
SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
AUDIO PART (1/3) - PARTIE AUDIO (1/3) - AUDIOSTUFEN (1/3) - CIRCUITO AUDIO (1/3) - AUDIO (1/3)



SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
AUDIO PART (2/3) - PARTIE AUDIO (2/3) - AUDIOSTUFEN (2/3) - CIRCUITO AUDIO (2/3) - AUDIO (2/3)

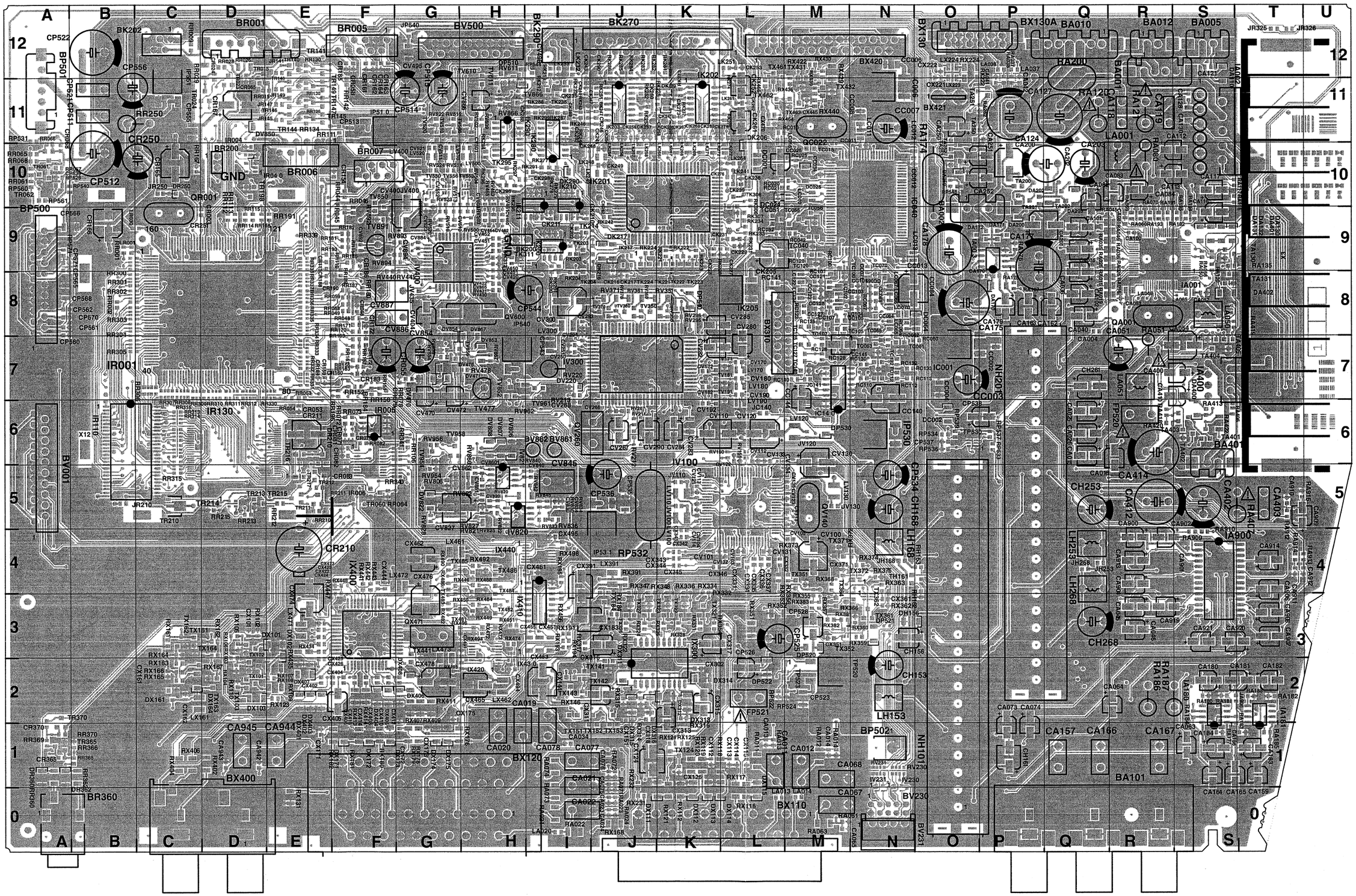


SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL
AUDIO PART (3/3) - PARTIE AUDIO (3/3) - AUDIOSTUFEN (3/3) - CIRCUITO AUDIO (3/3) - AUDIO (3/3)



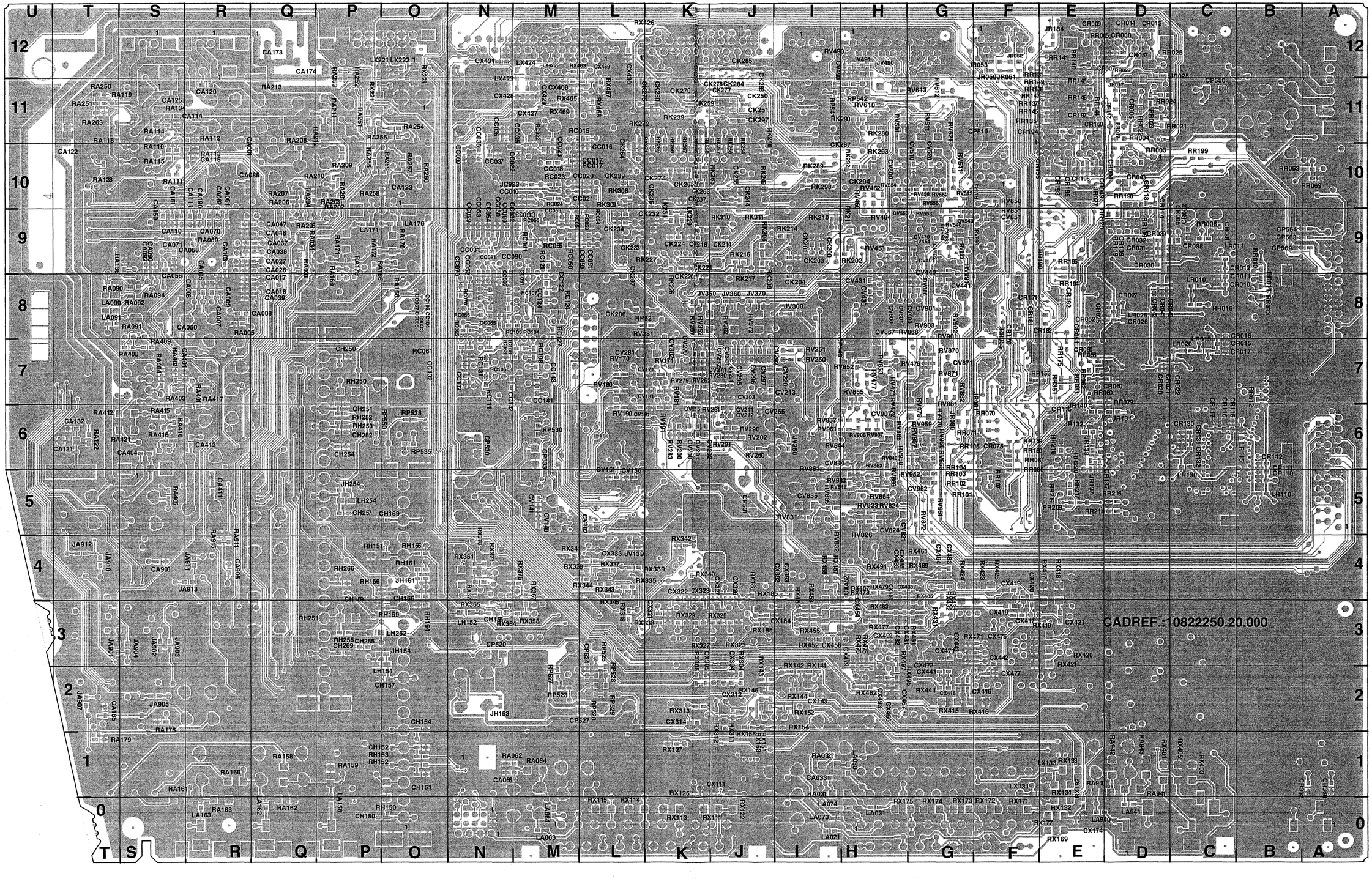
SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL

COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL

SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



COMPONENTS LOCATION (1/2) - LOCALISATION DES ELEMENTS (1/2)- LAGE DER BAUTEILE (1/2) - LOCALIZZAZIONE DEGLI ELEMENTI (1/2) - LOCALIZACION DE LOS COMPONENTES (1/2)

SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL

* SOLDER SIDE - COTE CUIVRE - LÖTSEITE - LATO SALDATURE - LADO DEL COBRE

1 | 2 | 3

BA001	R12
BA002	O9
BA005	S12
BA010	Q12
BA012	R12
BA101	Q0
BA401	S6
BK200	H9
BK202	C12
BK270	K12
BK290	I12
BP500	A8
BP501	A11
BP502	N1
BR001	D12
BR005	F12
BR006	E10
BR007	F10
BR200	D10
BR360	A0
BV001	A5
BV230	N0
BV231	N0
BV500	H12
BV861	I6
BV862	I6
BX110	K0
BX120	G0
BX130	O12
BX310	L8
BX400	D0
BX420	M12
BX421	O11

CA001	Q10*
CA004	Q8
CA005	R8 *
CA006	R8 *
CA007	R8 *
CA008	R8 *
CA009	R8 *
CA011	L1
CA012	M1
CA013	L1
CA014	M1
CA015	Q6
CA016	R6
CA017	R8 *
CA018	R8 *
CA019	H1
CA020	H1
CA021	I1
CA022	I0
CA023	J0
CA024	J0
CA025	Q6
CA026	Q6
CA027	R9 *
CA028	R9 *
CA033	I1 *
CA034	I1
CA035	Q9
CA036	Q8
CA037	Q9 *
CA038	R9 *
CA039	R8 *
CA040	Q8
CA041	P11
CA042	P11
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CA046	R3
CA047	R9 *
CA048	R9 *
CA050	R8 *
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CA058	S9 *
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CA063	S1
CA064	R2
CA065	M0
CA066	N1 *
CA067	M0
CA068	M1
CA070	R9 *
CA071	S9 *
CA073	P1

CA074	P1
CA075	J0
CA076	J1
CA077	I1
CA078	I1
CA081	R9
CA082	Q10
CA083	R10
CA084	R10
CA085	R10*
CA090	S9 *
CA092	S9 *
CA100	R9
CA101	Q9
CA102	Q8
CA103	R9 *
CA110	S9 *
CA111	R9 *
CA112	S10
CA113	S10
CA114	S11*
CA115	R10*
CA116	S9
CA117	S10
CA118	R11
CA119	R11
CA120	R11*
CA121	S12
CA122	T11*
CA123	O10*
CA124	P11
CA125	S11*
CA127	Q11
CA128	S11
CA130	S11
CA131	T6 *
CA132	T6 *
CA157	Q1
CA159	T1
CA160	S9 *
CA161	S9 *
CA162	Q8
CA163	P8
CA164	S1
CA165	S1
CA166	Q1
CA167	R1
CA173	Q12*
CA174	Q12*
CA175	O8
CA176	P8
CA177	P9
CA178	O9
CA179	P8
CA180	S2
CA181	T2
CA182	T2
CA183	T1
CA184	S1
CA185	T2 *
CA186	T1
CA190	R9 *
CA200	P10
CA201	Q9
CA202	Q10
CA203	Q10
CA250	O11
CA251	O10
CA252	O10
CA400	S7
CA401	S7 *
CA402	S5
CA403	T5
CA404	S6 *
CA410	S7
CA411	R5 *
CA412	R5
CA413	R6 *
CA414	R6
CA900	R4
CA901	S4
CA902	R4
CA903	S4 *
CA904	R4
CA905	R4 *
CA906	T4
CA907	T3
CA908	T3
CA909	T5
CA910	T5
CA911	T4
CA912	T4
CA913	R4
CA914	T4
CA919	R3
CA920	S3
CA921	S3

CA942	D1
CA943	D1
CA944	E1
CA945	D1
CC002	P7
CC003	O7
CC004	O7
CC006	N12
CC007	N11
CC008	N11
CC010	M10*
CC011	N10
CC012	N10
CC013	N9
CC016	L11*
CC017	M10*
CC018	M10*
CC020	L10*
CC021	L10*
CC022	M10*
CC023	M10*
CC025	L10
CC029	N9 *
CC030	N9 *
CC031	N9 *
CC032	M9 *
CC033	M10*
CC034	M10
CC035	N11*
CC036	N11*
CC037	N10*
CC038	N10*
CC039	N10*
CC050	L9 *
CC051	L9 *
CC052	N8 *
CC053	N9 *
CC054	N9 *
CC055	M9 *
CC063	N8 *
CC064	N8
CC065	N8 *
CC066	N8 *
CC067	N8 *
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CC144	M7
CC145	M7
CH150	O0 *
CH151	O1 *
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CH153	N2
CH154	O2 *
CH155	N3 *
CH156	N3
CH157	O2 *
CH159	P4 *
CH161	P1
CH166	O4 *
CH168	N5
CH169	O5 *
CH250	P7 *
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CH252	P6 *
CH253	Q5
CH254	P6 *
CH255	P3 *
CH257	P5 *
CH261	Q7
CH268	Q3
CH269	P3 *

CK200	I9 *
CK201	I9 *
CK202	I9
CK203	I9 *
CK204	I8 *
CK205	L9
CK206	L8 *
CK207	L9 *
CK210	I9
CK211	I9
CK214	J9 *
CK216	J8
CK217	J8
CK218	K9 *
CK221	K8 *
CK224	K9 *
CK226	K9 *
CK227	L9
CK228	K9
CK229	L9
CK231	L9
CK232	K9 *
CK233	L9 *
CK234	L9 *
CK235	I11
CK236	K10*
CK237	K10*
CK238	L10
CK239	L10*
CK240	I11
CK241	K11
CK242	J9
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CK245	I11
CK246	J11
CK247	I11
CK248	J10
CK249	J10
CK250	J11*
CK251	J11*
CK252	L11
CK253	L12
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CK285	J12*
CK286	J12*
CK287	H11*
CK288	I11
CK289	I11
CK290	J12
CK294	H10*
CK296	H10
CK297	J11*
CK298	I10
CP510	F11*
CP511	B11
CP512	B10
CP513	F11
CP514	G11
CP515	G11
CP520	N3 *
CP521	B11
CP522	B12
CP523	M2
CP524	L2 *
CP525	L3
CP526	L2
CP527	L2 *
CP528	M3

CP530	N6 *
CP531	J5 *
CP533	M6 *
CP534	N5
CP535	J5
CP536	J5
CP537	O6
CP538	P6
CP539	A10
CP540	H7 *
CP543	I7
CP544	I8
CP550	C11*
CP555	C11
CP556	B11
CP560	A8
CP561	A8
CP562	A8
CP563	A9 *
CP564	A9 *
CP565	A9
CP566	B9
CP568	A8
CP569	A9 *
CP570	A8
CP571	A9
CR001	C9 *
CR002	C9 *
CR003	D9
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CR017	C7 *
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CR022	C7 *
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CR041	D8 *
CR042	D8 *
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CR048	F8
CR049	E10*
CR050	E7 *
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CR052	E8 *
CR053	E6
CR055	F7
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CR058	F12
CR060	D7 *
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CR132	C6 *
CR137	E6 *
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CR155	E10*
CR159	E7
CR160	F7

CR161	F12
CR162	F12
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CR183	F7
CR184	E7
CR185	F12
CR186	F9
CR188	E8
CR190	E8
CR192	E8 *
CR193	E10*
CR194	E11*
CR195	E10*
CR196	E10*
CR197	E11*
CR210	E4
CR211	E6
CR250	C10
CR251	C9
CR360	A1 *
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CR365	A1
CR370	A1
CV100	M4
CV101	K4
CV102	L5 *
CV103	L4
CV104	K5
CV105	M5
CV110	K6
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CV122	L6
CV123	M5
CV130	M6
CV131	L4
CV132	L4
CV133	L6
CV134	M5
CV135	M5
CV140	M5 *
CV141	M5 *
CV150	L5 *
CV151	L5 *
CV170	L7
CV171	L7 *
CV172	K7
CV180	L7
CV181	L7 *
CV182	K7
CV190	L7
CV191	L6 *
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CV202	K6 *
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CV220	J7 *
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CV251	I7
CV265	J6 *
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CV267	J6
CV268	I6
CV270	K7 *
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CV272	J7 *
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CV281	K7 *
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CV283	K6
CV284	K6
CV285	K8
CV290	J6
CV291	J7 *
CV292	J7 *
CV293	I8
CV294	I7
CV295	J7 *
CV296	J7 *

CV297	J7 *
CV300	I8
CV301	J7 *
CV302	K7 *
CV303	J7 *
CV400	G9
CV401	G9 *
CV402	G9 *
CV403	G8 *
CV404	G8
CV420	H9
CV421	H9
CV422	H9
CV430	H8 *
CV431	H8 *
CV440	G9 *
CV441	G8 *
CV450	H9
CV451	H9
CV452	H9
CV460	H9
CV462	H9
CV464	H9
CV470	G7
CV472	G7
CV479	H9 *
CV490	H12*
CV495	G12
CV496	I12
CV500	H10*
CV501	H10
CV503	H10
CV510	G10*
CV511	G10
CV513	G9
CV520	G10*
CV521	G10
CV523	G9
CV540	G9 *
CV552	G10
CV553	H10*
CV600	H8 *
CV601	H8 *
CV820	H5
CV821	H5 *
CV824	H5 *
CV827	G5
CV830	I5
CV834	I5
CV835	I5 *
CV840	I5
CV844	H6 *
CV845	I5
CV851	F9 *
CV854	G7
CV860	H5
CV861	H5
CV862	H5
CV865	H8
CV866	H11
CV867	H7 *
CV871	G7 *
CV883	G9 *
CV884	G9
CV886	F8
CV887	F8
CV892	F9
CV894	G9
CV901	G8 *
CV907	H6 *
CV952	G5 *
CX101	D3
CX111	J1 *
CX112	K1
CX113	L1
CX114	L1
CX115	L1
CX124	J1
CX125	K1
CX143	I2 *
CX144	I2
CX151	J2
CX161	C2
CX162	C2
CX171	E1
CX172	G1
CX173	G1
CX174	E0 *
CX175	G2
CX183	I3
CX184	J3 *
CX221	O11
CX222	O12
CX302	K2
CX304	J2 *
CX305	K2 *
CX311	J2

CX312	J2 *
CX313	K2
CX314	K2 *
CX315	K2
CX316	J3
CX317	K3
CX318	J2
CX321	K3 *
CX322	K4 *
CX323	K4 *
CX326	J4 *
CX327	J4 *
CX331	L4
CX332	L4
CX333	L4 *
CX334	L4
CX335	L4
CX336	L4
CX337	L4
CX341	K4
CX342	K4
CX343	K4
CX344	K4
CX345	K4
CX346	K4
CX351	M3
CX361	N3
CX371	M4
CX391	I4
CX392	I4 *
CX393	I4 *
CX402	E2
CX404	F2
CX405	F2
CX406	F2
CX408	F2
CX410	F2
CX412	G2
CX413	F2
CX414	F2
CX415	G2 *
CX416	G2 *
CX417	F3 *
CX418	F3 *
CX419	F4 *
CX420	F3 *
CX421	E3 *
CX422	E3
CX423	E3
CX424	E3
CX425	E3
CX426	E2
CX427	M11*
CX428	M11*
CX429	M11*
CX430	L12*
CX431	N12*
CX441	G2 *
CX442	G3 *
CX443	G3 *
CX444	F4
CX445	M11
CX451	I3
CX452	I4 *
CX453	I3
CX454	I3 *
CX455	I3
CX456	I3 *
CX461	I4
CX462	G4
CX463	G4 *
CX464	G4 *
CX465	H2
CX466	H2 *
CX467	H2 *
CX468	M11*
CX469	L11*
CX470	L11
CX471	G3 *
CX472	G3 *
CX473	E3
CX474	E3
CX475	F3 *
CX476	G3
CX477	F2 *
CX478	G2
CX479	H3 *
CX481	H3 *
CX482	H3 *
CX483	H4 *
CX484	H4 *
CX485	H4 *
CX486	H4 *
CX491	H3
CX492	H3 *
CX493	H2 *
CX494	H2

CX495	I4

DA110	S12
DA130	S9
DA131	S9
DA132	S9
DA170	P8
DA171	P9
DA172	P9
DA200	P9
DA202	Q10
DA203	Q10
DA250	O10
DA400	S6
DA401	S9
DA402	S8
DC001	L10
DC002	O6
DC024	L10
DC025	M10
DC064	O8
DH156	N3
DK206	L10
DK216	J9
DK217	J9
DK239	K11
DK290	I10
DP510	H12
DP520	M3
DP521	N3
DP522	L2
DP530	M6
DP540	K8
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DR250	C10
DR360	A1
DR362	A1
DV220	I7
DV470	G7
DV471	G7
DV476	G7
DV806	H6
DV807	H6
DV808	H6
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DV850	D11
DV853	H7
DV854	G7
DV867	H7
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DX112	K0
DX113	K0
DX114	K0
DX115	L0
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DX164	C2
DX171	F1
DX172	F1
DX173	F1
DX174	G1
DX175	G1
DX311	J2
DX312	K2
DX313	K2
DX314	K2
DX315	J2
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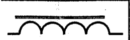
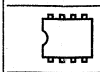
DX407	E2
DX408	G2



FP520	R6
FP521	L2



IA001	R9
IA002	S11
IA003	P9
IA180	S2
IA181	T2
IA400	S7

IA900	S4
IC001	O7
IC006	N11
IC040	N10
IC140	M7
IK200	I9
IK201	K10
IK202	K11
IK203	J11
IK205	L8
IK210	I10
IK211	I10
IK217	J9
IK280	I11
IK290	H11
IP510	F11
IP530	N6
IP531	J5
IP540	H7
IP551	C11
IR001	D8
IR004	D10
IR005	F6
IR006	F6
IR040	D10
IR110	B6
IR130	D6
IV100	L5
IV230	N0
IV231	N0
IV300	J7
IV400	G9
IV820	H5
IV821	H5
IX300	K2
IX400	F3
IX410	I3
IX420	H3
IX430	H3
IX440	I4

JA901	T3 *
JA902	S3 *
JA903	S3 *
JA904	S3 *
JA905	S2 *
JA906	S2
JA907	T2 *
JA910	T4 *
JA911	R4 *
JA912	T4 *
JA913	R4 *
JC140	L6
JC141	M7
JC923	M10*
JH153	N2 *
JH154	O3 *
JH161	O4 *
JH168	N4
JH253	Q4
JH254	P5 *
JH268	Q4
JP540	G12
JR017	D11*
JR025	D12*
JR027	E10*
JR050	F12*
JR051	F12*
JR052	F12*
JR053	F12*
JR080	G6 *
JR081	G6 *
JR131	D6 *
JR132	E6 *
JR137	E6 *
JR138	E6 *
JR140	E6 *
JR141	E12
JR145	E11
JR147	E11
JR149	E11
JR184	E12*
JR210	B5
JR250	C10
JR325	T12
JR326	T12
JV100	K5
JV110	K5
JV120	M6
JV130	M5
JV139	L4 *
JV260	I6 *
JV300	I8 *
JV350	K8 *

JV360	J8 *
JV370	J8 *
JV400	G10
JV435	G8
JV490	H12*
JV491	H12*

LA001	R10
LA013	L0
LA014	M0
LA020	I0
LA021	I0 *
LA030	H1 *
LA031	H0 *
LA037	P12
LA038	P12
LA049	R8
LA050	S8
LA051	R7
LA063	M0 *
LA064	M0 *
LA065	S8
LA073	I0 *
LA074	H0 *
LA090	T8 *
LA091	T8 *
LA158	P0 *
LA162	Q0 *
LA163	R0 *
LA170	O9 *
LA171	P9 *
LA940	E0 *
LA941	D0 *
LC010	M10
LC011	N11
LC012	N10
LC013	N9
LC016	L11
LC065	N8
LC066	N8
LC067	N8
LC070	N8
LC102	M8
LC104	M8
LC122	M8
LC124	M8
LH152	N3 *
LH153	N2
LH154	O3 *
LH168	N4
LH252	P3 *
LH253	Q4
LH254	P5 *
LH268	Q4
LK229	K9 *
LK231	K9 *
LK232	I12
LK233	I12
LK239	L10
LK241	L10
LK248	J10
LK249	J10
LK251	L12
LK254	J10
LK256	J10
LK257	J10
LK258	J10
LK261	L11
LK264	L10
LK266	K10
LK267	K10
LK268	K10
LK269	K10
LK271	K10
LK272	L10
LR001	B9
LR010	C8 *
LR011	C9 *
LR015	C7 *
LR020	C7 *
LR025	D8 *
LR030	C9
LR110	B5 *
LR115	B6 *
LR130	C6 *
LV100	K5
LV110	K5
LV120	M6
LV130	M5
LV170	L7
LV180	L7
LV190	L6
LV300	I8
LV400	G10

LV500	H10
LV510	G10
LV520	G10
LX131	F1 *
LX133	E1 *
LX161	C2
LX221	P11*
LX222	O12*
LX223	O11
LX224	O12
LX391	J4
LX423	M12*
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LX425	M12*
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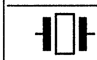
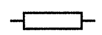
LX462	H2
LX471	E3
LX472	G4
LX473	G2



NH101	O0
NH201	P7
QA001	R8
QC022	M11
QR001	C9
QV140	M5
QV260	J6
QV600	H8
QX471	G3



RA005	R8 *
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RA012	M1
RA013	L1
RA014	M1
RA015	R8
RA016	R8
RA019	R8
RA021	I0
RA022	I0
RA023	J0
RA024	J0
RA025	R9
RA026	R9
RA031	I1 *
RA032	I1 *
RA033	Q9 *
RA034	Q9 *
RA035	R9
RA036	R9
RA037	P11
RA038	P11
RA045	R9
RA046	R9
RA050	S9
RA051	R7
RA058	S9
RA059	R9
RA060	R9
RA061	M0
RA062	N1 *
RA063	M0
RA064	M1 *
RA069	R9 *
RA070	R9
RA071	J0
RA072	J1
RA073	I0
RA074	I1
RA080	R10
RA090	T8 *
RA091	T8 *
RA092	S8 *
RA094	S8 *
RA110	S10*
RA111	S10*
RA112	R11*
RA113	R10*
RA114	S11*
RA115	S10*
RA116	S10
RA117	S10
RA118	T11*
RA119	T11*
RA120	Q11
RA121	R11
RA122	T6 *
RA130	S9
RA133	T10*
RA134	S11*
RA135	S9

RA136	S9 *
RA158	Q1 *
RA159	P1 *
RA160	R1 *
RA161	S0 *
RA162	Q0 *
RA163	R0 *
RA166	P9 *
RA167	P8
RA168	O9 *
RA169	P9 *
RA170	O9 *
RA171	P9 *
RA172	P9 *
RA173	P9 *
RA174	O10
RA175	P8
RA176	P9
RA177	S1
RA178	S2 *
RA179	T1 *
RA180	S2
RA181	S2
RA182	T2
RA183	S2
RA184	S2
RA185	T1
RA186	R2
RA187	S2
RA188	T2
RA191	R9
RA192	S9
RA193	R9
RA194	S9
RA195	S9
RA200	Q12
RA201	P10*
RA202	Q9 *
RA203	P10*
RA204	Q10*
RA205	Q9 *
RA206	Q10*
RA207	Q10*
RA208	Q10*
RA209	P10*
RA210	Q10*
RA211	P11*
RA212	P11*
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RA253	P12*
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RA260	O10*
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RA262	P11
RA263	T11*
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RA408	S7 *
RA409	S7 *
RA410	S6 *
RA412	S6 *
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RA415	S6 *
RA416	S6 *
RA417	R6 *
RA418	R6
RA419	S8
RA420	R6
RA421	S6 *
RA422	S6
RA909	S4
RA910	S4
RA911	R4 *
RA912	T5
RA913	T4
RA914	T4
RA915	R4 *
RA916	T5
RA940	E1 *
RA941	D1 *
RA942	D1 *
RA943	D1 *
RC015	M11*
RC016	L11

RC017	M10*
RC020	M10
RC021	M10
RC022	M10*
RC023	M10*
RC024	M10*
RC025	M10
RC041	M9 *
RC042	M9
RC050	M9 *
RC051	M9 *
RC052	L9
RC053	L9 *
RC054	L9 *
RC055	M9 *
RC056	M9 *
RC060	O7
RC061	N7 *
RC062	N7
RC063	N7 *
RC064	N8
RC065	N8 *
RC066	N8 *
RC067	N8
RC070	N8 *
RC100	M8
RC101	M8
RC103	N8 *
RC104	M8 *
RC105	N7 *
RC106	M7 *
RC107	M8 *
RC108	M7 *
RC110	N7
RC111	N7 *
RC112	N7
RC113	N7
RC120	M9
RC121	M9 *
RC123	M8
RC124	M8 *
RC125	M8
RC126	M7
RC127	M8 *
RC128	M7
RC130	N7
RC131	N7 *
RC132	N7
RC133	N7
RC140	M7
RC141	L8
RH150	O1 *
RH151	P4 *
RH152	O1 *
RH153	O1 *
RH155	O4 *
RH159	O3 *
RH161	O4 *
RH162	O3
RH163	O4
RH164	O3 *
RH166	O4 *
RH250	P7 *
RH251	P3 *
RH252	P6 *
RH253	P6 *
RH255	P3 *
RH266	P4 *
RK200	I9
RK201	I9
RK202	I9 *
RK203	I9
RK204	I8
RK208	J9 *
RK209	J9 *
RK210	I9 *
RK211	I9 *
RK212	I11
RK213	I12
RK214	I9 *
RK216	J9 *
RK217	J9 *
RK221	K9
RK222	K9
RK223	K9
RK224	J9
RK226	K9 *
RK227	K9 *
RK228	L9
RK231	L9
RK232	I11
RK233	L9
RK234	L9
RK235	K11
RK237	K11
RK239	K11*
RK242	J9

RK243	I11
RK244	I11
RK246	I11
RK247	J11
RK248	J10*
RK249	J10*
RK251	J11
RK252	J11
RK253	J11
RK254	J10*
RK256	J10*
RK257	J10*
RK258	J10*
RK263	K10*
RK266	K10*
RK267	K10*
RK268	K10*
RK269	K10*
RK271	K10*
RK272	L10*
RK273	K11
RK274	L11
RK275	L11
RK277	I10
RK278	I10
RK279	I10
RK280	H11*
RK281	K12
RK282	J12
RK283	J12
RK284	J12
RK285	J12
RK286	J12
RK287	I11
RK288	I11
RK289	I10 *
RK290	H11*
RK291	I10
RK292	H10*
RK293	H10*
RK294	H10
RK295	H10
RK296	H10
RK297	H10
RK298	I10 *
RK299	I11
RK306	L10
RK307	L9
RK308	L10*
RK309	L9 *
RK310	J9 *
RK311	J9 *
RK312	H9
RP520	L2 *
RP521	K8 *
RP522	L2
RP523	M2 *
RP524	M2
RP525	L2 *
RP526	A10
RP527	M2 *
RP528	L2 *
RP529	L2 *
RP530	M6 *
RP531	A11
RP532	J5
RP533	P6
RP534	O6
RP535	O6 *
RP536	O6
RP537	P6
RP538	O6 *
RP539	O6
RP540	A10
RP541	I11 *
RP542	H11*
RP543	O10
RP544	I12
RP550	P6 *
RP560	A10
RP561	A10
RP571	A9
RR001	B9
RR002	B8
RR003	D10*
RR004	D10*
RR005	E12*
RR006	C9 *
RR009	C12
RR010	B9 *
RR011	B8 *
RR012	B7 *
RR013	B8 *
RR015	E11
RR016	C8 *
RR017	D11*
RR021	D11*

COMPONENTS LOCATION (2/2) - LOCALISATION DES ELEMENTS (2/2) - LAGE DER BAUTEILE (2/2) - LOCALIZZAZIONE DEGLI ELEMENTI (2/2) - LOCALIZACION DE LOS COMPONENTES (2/2)

SMALL SIGNAL BOARD - PLATINE PETITS SIGNAUX - SIGNAL-PLATINE - PIASTRA PICCOLI SEGNALI - PLACA PEQUEÑA SEÑAL

* SOLDER SIDE - COTE CUIVRE - LÖTSEITE - LATO SALDATURE - LADO DEL COBRE

RR022	D11*
RR023	D11*
RR024	D11*
RR025	D12*
RR026	D12
RR027	D11*
RR028	D12
RR029	D12
RR044	F10
RR045	F9
RR046	F9
RR048	F8
RR049	F8
RR051	E7 *
RR053	E7
RR054	E7
RR055	F8 *
RR056	E7 *
RR058	F8
RR059	F8
RR060	E7 *
RR061	A10
RR062	E7 *
RR063	A10*
RR064	F5
RR065	A10
RR066	A10
RR067	A10
RR068	A10
RR069	A10*
RR070	F6 *
RR071	F6 *
RR072	F6
RR073	F6
RR078	G7
RR079	E7 *
RR080	F5 *
RR081	F6 *
RR082	F6
RR101	F5 *
RR102	F5 *
RR103	F5 *
RR104	F6 *
RR105	F6 *
RR106	G6
RR107	F5 *
RR109	D9 *
RR110	E9
RR111	F11
RR112	D9
RR113	D9
RR114	D9
RR115	D9
RR116	D9
RR117	D11*
RR119	D9 *
RR120	D9 *
RR130	E12
RR131	E12*
RR134	E11
RR135	E11*
RR136	E11
RR137	E11*
RR138	E11
RR139	E11*
RR140	E12*
RR141	E12*
RR142	F11
RR144	E11*
RR145	E11*
RR146	E11*
RR147	E11*
RR148	E12*
RR149	E11*
RR150	F7
RR151	F7
RR152	F7
RR153	E7 *
RR154	F9
RR156	F7
RR157	F7
RR159	F6 *
RR160	F6 *
RR161	F7
RR163	F7
RR167	C10
RR170	F8
RR171	F8
RR172	F7
RR175	E7 *
RR180	F8
RR181	F9
RR182	F9
RR183	F7
RR184	F7
RR185	F9
RR187	F8
RR189	F8

RR190	E9 *
RR191	E9
RR193	E9
RR194	E8 *
RR195	E9 *
RR196	F7
RR198	D10*
RR199	C10*
RR209	E5 *
RR210	E5
RR211	E5
RR212	E5
RR213	D5
RR214	D5 *
RR215	D5
RR216	D5 *
RR217	E5 *
RR218	E6 *
RR219	E5 *
RR220	E6 *
RR250	C11
RR300	B9
RR301	B8
RR302	B8
RR303	B8
RR304	B8
RR305	B7
RR306	C7
RR307	C7
RR308	C7
RR309	C7
RR310	D7
RR311	D7
RR312	D7
RR313	C6
RR314	C6
RR315	C5
RR316	C6
RR330	E7
RR331	E7
RR332	E7
RR333	E7
RR334	E8
RR335	E8
RR336	E8
RR337	E8
RR338	E9
RR339	E9
RR340	G5
RR341	G6
RR360	A1
RR361	E7 *
RR362	B1
RR365	B1
RR366	B1
RR369	A1
RR370	A1
RV150	L6
RV151	L6
RV170	L7 *
RV171	K7 *
RV180	L7 *
RV181	K7 *
RV190	L6 *
RV191	K6 *
RV200	K6 *
RV201	J6 *
RV202	J6 *
RV211	J6
RV212	J6
RV213	I7
RV220	I7
RV230	N1
RV231	N1
RV250	I7 *
RV251	I7 *
RV260	J6 *
RV261	J7 *
RV262	K7 *
RV267	J6
RV279	K7 *
RV280	K7 *
RV281	L7 *
RV283	K6 *
RV290	J6 *
RV295	K8
RV296	K8
RV297	K8 *
RV350	K8
RV351	K8
RV352	K8 *
RV360	J8
RV361	J8
RV362	J8 *
RV370	J8
RV371	J8
RV372	J8 *
RV430	H8

RV431	H8
RV440	F8
RV441	G8
RV453	H9 *
RV454	G9 *
RV460	H10*
RV461	H10
RV462	H10*
RV463	H10
RV464	H10*
RV465	H10
RV470	G6 *
RV471	H7 *
RV472	H7 *
RV475	G6 *
RV476	G7 *
RV477	H7 *
RV478	H7
RV490	H12*
RV500	H9
RV501	H10*
RV502	H11
RV503	H9
RV504	H10
RV510	G9
RV511	G10*
RV512	G11
RV513	G10
RV514	G10
RV520	G9
RV521	G10*
RV522	G11
RV523	G10
RV524	G10
RV540	G9 *
RV541	G10*
RV542	G10*
RV543	G10*
RV550	G9 *
RV551	G9
RV552	G10*
RV553	G10*
RV554	H10*
RV555	G10*
RV556	G10*
RV609	H11
RV610	H11*
RV611	H11
RV612	G11*
RV613	H11*
RV806	G5
RV820	H5
RV821	H5
RV822	H5
RV823	H5 *
RV824	H5 *
RV825	H5
RV826	H5 *
RV827	H5
RV828	G5
RV830	I5
RV831	I5 *
RV832	I5 *
RV833	I5
RV834	I5
RV835	I5 *
RV836	I5
RV840	H5
RV841	H5 *
RV842	I5
RV843	H5 *
RV844	H6 *
RV845	H5
RV846	H6 *
RV850	F10*
RV851	F9 *
RV852	H7 *
RV853	H7 *
RV854	G7
RV855	H7 *
RV856	G7
RV857	H6 *
RV860	H5
RV861	I6 *
RV862	H5
RV863	H5 *
RV864	H5 *
RV865	H6 *
RV866	H11
RV867	H7
RV868	G7 *
RV869	H5 *
RV870	G7 *
RV871	G7 *
RV872	G5 *
RV881	G7 *
RV882	G7 *
RV883	G9 *

RV886	G8 *
RV891	F9 *
RV892	F9
RV893	G9
RV894	G9
RV896	G9 *
RV901	G8 *
RV902	G8 *
RV903	G8 *
RV906	H6 *
RV907	H6 *
RV951	G5 *
RV952	G5 *
RV953	G6 *
RV954	G5
RV956	G6
RV957	G6 *
RV958	G6 *
RV959	G6 *
RV960	G6 *
RV961	H6 *
RV962	H7
RX102	D3
RX103	D3
RX104	D2
RX105	D3
RX106	D3
RX107	E2
RX108	E2
RX109	E2
RX110	D2
RX111	J0 *
RX112	K0
RX113	K0 *
RX114	L0 *
RX115	L0 *
RX116	L0
RX117	L0
RX118	K1
RX119	K1
RX120	K1
RX121	K0
RX122	J0 *
RX123	E2
RX124	K1
RX125	K1
RX126	K1 *
RX127	K1 *
RX131	E0
RX132	E0 *
RX133	E1 *
RX134	E1 *
RX141	I2 *
RX142	I2 *
RX143	J2 *
RX144	I2 *
RX145	J2 *
RX146	I2
RX151	J2 *
RX152	I2 *
RX153	J2 *
RX154	I2 *
RX155	J2 *
RX161	C3
RX162	D3
RX163	C2
RX164	C3
RX165	C2
RX166	C2
RX167	D3
RX168	J0
RX169	E0 *
RX171	F0 *
RX172	F0 *
RX173	G0 *
RX174	G0 *
RX175	H0 *
RX176	G1
RX177	E0 *
RX178	G1
RX179	G1
RX180	F1
RX181	F1
RX182	F1
RX183	J4 *
RX184	J3
RX185	I3 *
RX186	J3 *
RX191	I3
RX192	E0 *
RX193	I3
RX194	I3
RX195	I4
RX221	P11*
RX222	O11
RX223	O12*
RX224	O12
RX231	J0

RX232	J1
RX304	J2 *
RX305	K2 *
RX311	J2 *
RX312	J2 *
RX313	K2 *
RX314	J2
RX315	J2
RX316	K2
RX317	I3
RX318	L3 *
RX322	J3
RX323	J3 *
RX324	J3
RX325	J3 *
RX326	K3
RX327	K3 *
RX328	K3
RX329	K3 *
RX331	K3
RX332	K4
RX333	K3 *
RX334	K4
RX335	L4 *
RX336	K4
RX337	L4 *
RX338	L4 *
RX339	L4 *
RX340	K4 *
RX341	M4 *
RX342	K4 *
RX343	L4 *
RX344	L4 *
RX345	L4 *
RX347	J4
RX348	J4
RX351	L3
RX352	L3
RX353	L4
RX354	K3
RX355	M4
RX356	M4
RX357	M3
RX358	M3 *
RX359	N3
RX360	N3
RX361	N4 *
RX362	N3
RX363	N4
RX364	N3 *
RX365	N3 *
RX366	N3
RX367	M4 *
RX368	M4
RX371	N4 *
RX372	N4
RX373	M4
RX374	N4
RX375	M4 *
RX376	N4
RX377	N4 *
RX378	N4 *
RX381	M3
RX382	M3
RX383	M3
RX391	J4
RX401	D1 *
RX402	D1
RX403	C1 *
RX404	C1
RX405	C1 *
RX406	C1
RX407	G2
RX409	G2
RX411	G2
RX413	F2
RX414	F2
RX415	G2 *
RX416	F2 *
RX417	E4 *
RX418	E4 *
RX419	E3 *
RX420	E3 *
RX421	E3 *
RX422	M12
RX423	F4 *
RX424	G4 *
RX425	F4 *
RX426	L12*
RX429	M12
RX430	M12
RX431	G3 *
RX432	G3 *
RX433	G4 *
RX434	E2
RX435	E2
RX436	M11
RX439	M11

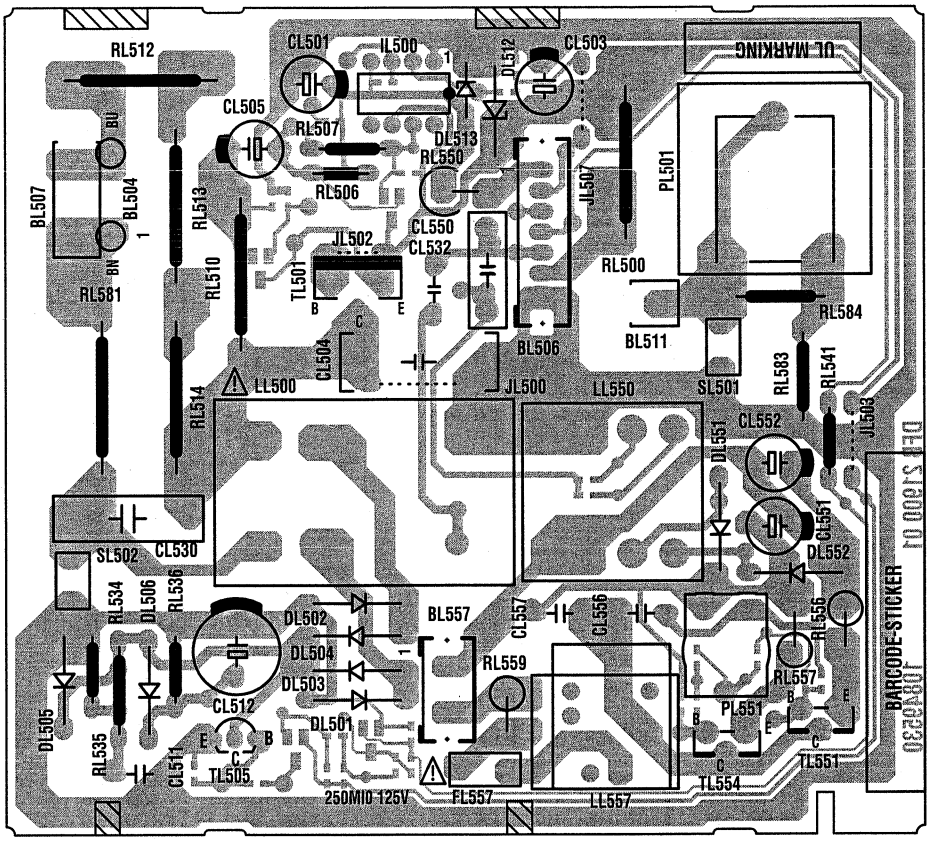
RX440	M11
RX441	F4
RX442	F4
RX443	F4
RX444	G2 *
RX446	H4
RX447	F3
RX448	F4
RX449	H3
RX450	H3
RX451	H3
RX452	I3 *
RX453	I3 *
RX454	I3 *
RX455	I3 *
RX456	I3
RX457	I4 *
RX458	I4 *
RX461	G4 *
RX462	H2 *
RX463	M12*
RX464	L11
RX465	M11*
RX466	L11
RX467	L11 *
RX468	L11 *
RX469	M11*
RX471	G3 *
RX472	H3
RX473	H3
RX474	H3
RX475	H3 *
RX476	H3 *
RX477	H3 *
RX478	H3 *
RX479	H4 *
RX481	G3 *
RX482	G3
RX483	H3 *
RX484	H3
RX485	G4 *
RX486	G4
RX487	H4 *
RX488	H4
RX489	G4 *
RX490	G4
RX491	H4 *
RX492	H4
RX493	H2
RX494	H3
RX495	H2 *
RX496	G3
RX497	H3 *
RX498	I4

TA130	S9
TA131	S8
TA200	P10
TA201	P10
TA202	Q10
TA250	P11
TA251	P11
TA252	O10
TA253	O10
TA401	S6
TA402	S6
TA403	S6
TA404	S7
TA405	S7
TC015	M10
TC040	M9
TC051	L9
TC055	M9
TC056	M9
TC061	N7
TC063	N7
TC065	N8
TC070	N8
TC100	M8
TC105	M8
TC107	M8
TC112	N7
TC120	M9
TC125	M8
TC127	M7
TC132	N7
TC140	M7
TH161	O4
TK203	I9
TK204	I8
TK214	I9
TK221	K9
TK222	K9
TK223	K9

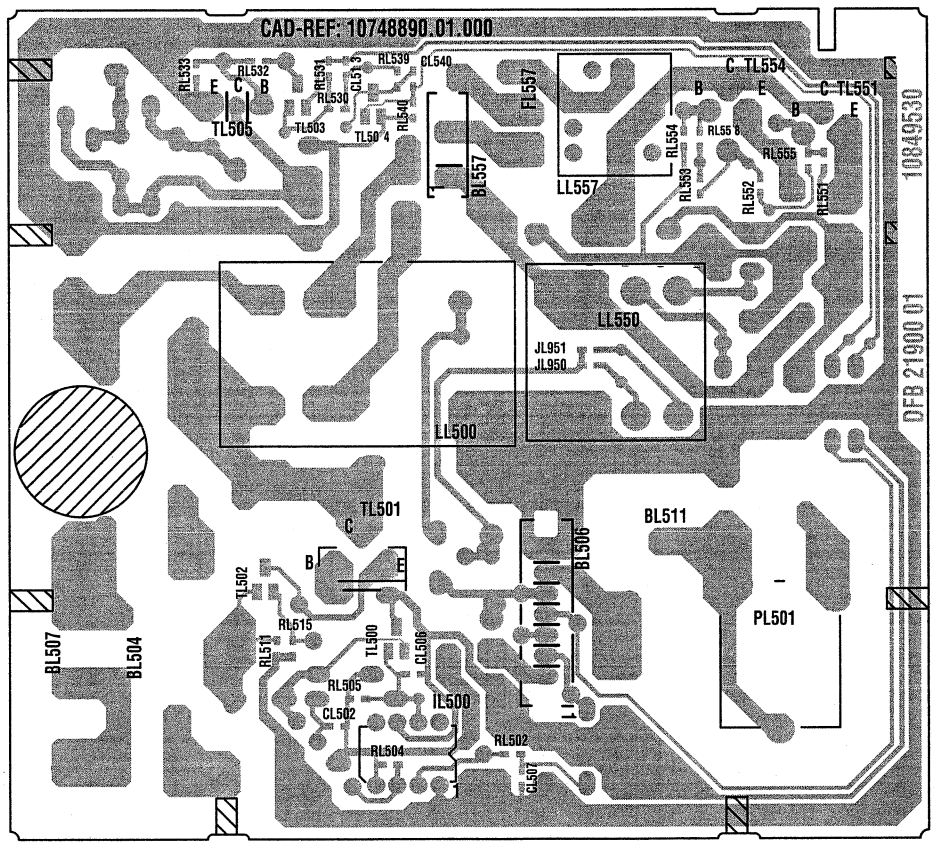
TK224	J9
TK235	I11
TK295	H10
TK306	L10
TK311	I9
TP520	M2
TP523	M2
TP530	O6
TR015	D11
TR023	D11
TR024	D11
TR060	F5
TR061	A10
TR062	A10
TR140	E12
TR141	E12
TR144	E11
TR145	E11
TR146	E11
TR147	E11
TR148	E11
TR149	E11
TR198	D10
TR210	C5
TR211	E5
TR212	E5
TR213	D5
TR214	D5
TR215	E5
TR216	E6
TR217	E5
TR365	A1
TR370	A2
TV171	L7
TV181	L7
TV191	L6
TV350	J8
TV360	J8
TV370	J8
TV477	H7
TV500	H11
TV510	G11
TV520	G11
TV550	G10
TV553	H10
TV556	G10
TV610	H11
TV611	H11
TV850	F9
TV852	H7
TV856	G7
TV866	H11
TV891	F9
TV954	G6
TV958	G6
TV961	I7
TX101	D2
TX102	D3
TX103	D2
TX124	K1
TX141	J2
TX142	I2
TX143	I2
TX151	I2
TX152	J2
TX153	J2
TX161	C3
TX162	C3
TX163	D2
TX164	C2
TX184	J3
TX321	K3
TX322	K3
TX323	K3
TX326	J3
TX327	J3
TX351	M4
TX352	M3
TX361	N3
TX362	N3
TX364	M3
TX371	M4
TX372	N4
TX431	M11
TX432	M11
TX441	G2
TX461	L12
TX462	L11
TX463	M11
TX481	G3
TX482	H3
TX483	G4
TX484	H4
TX485	G4
TX486	H4

DYNAMIC FOCUS MODULE - MODULE FOCUS DYNAMIQUE - DYNAMIKFOKUS BAUSTEIN - MODULO FUOCO DINAMICO - MÓDULO FOCO DINÁMICO

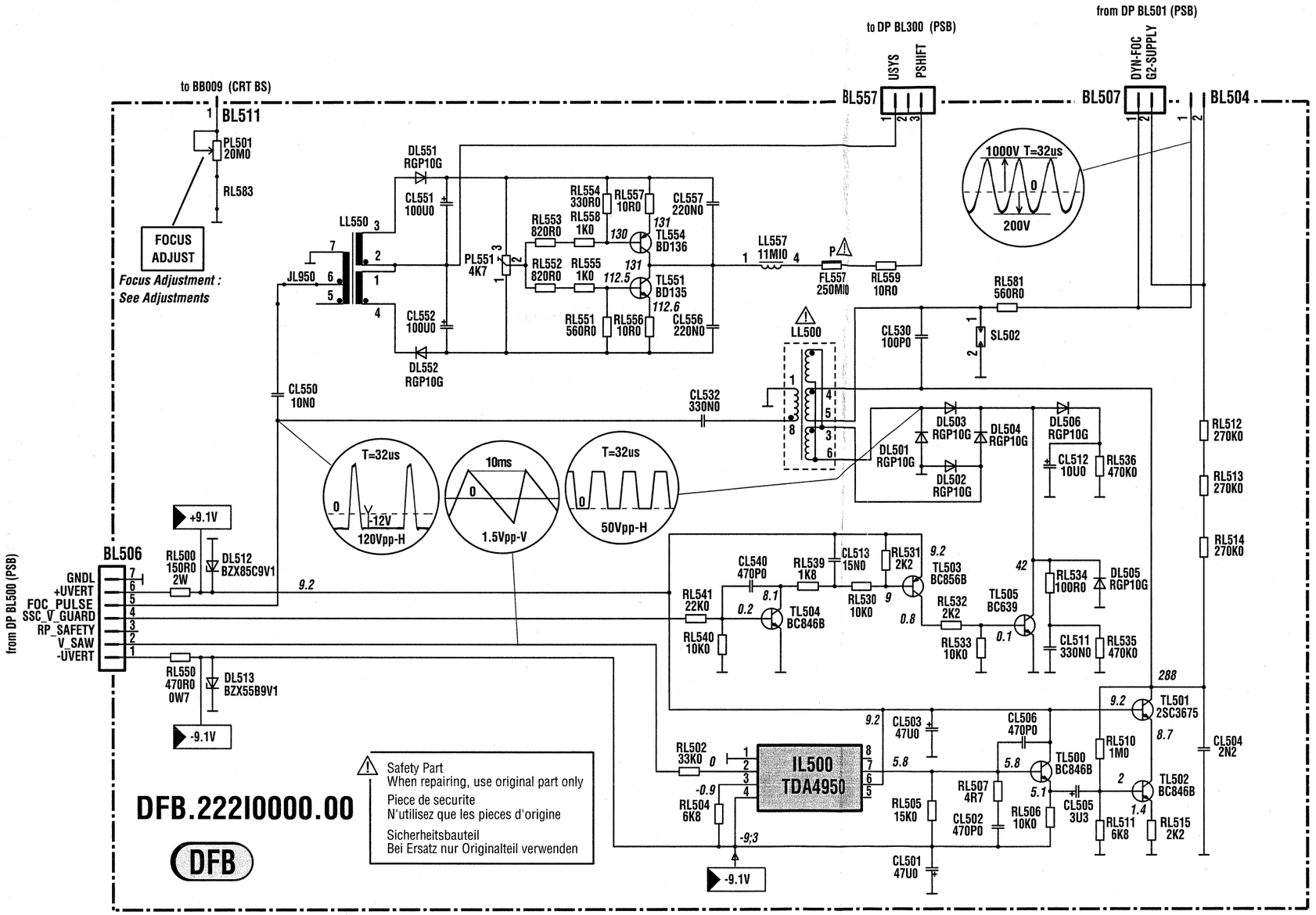
COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS

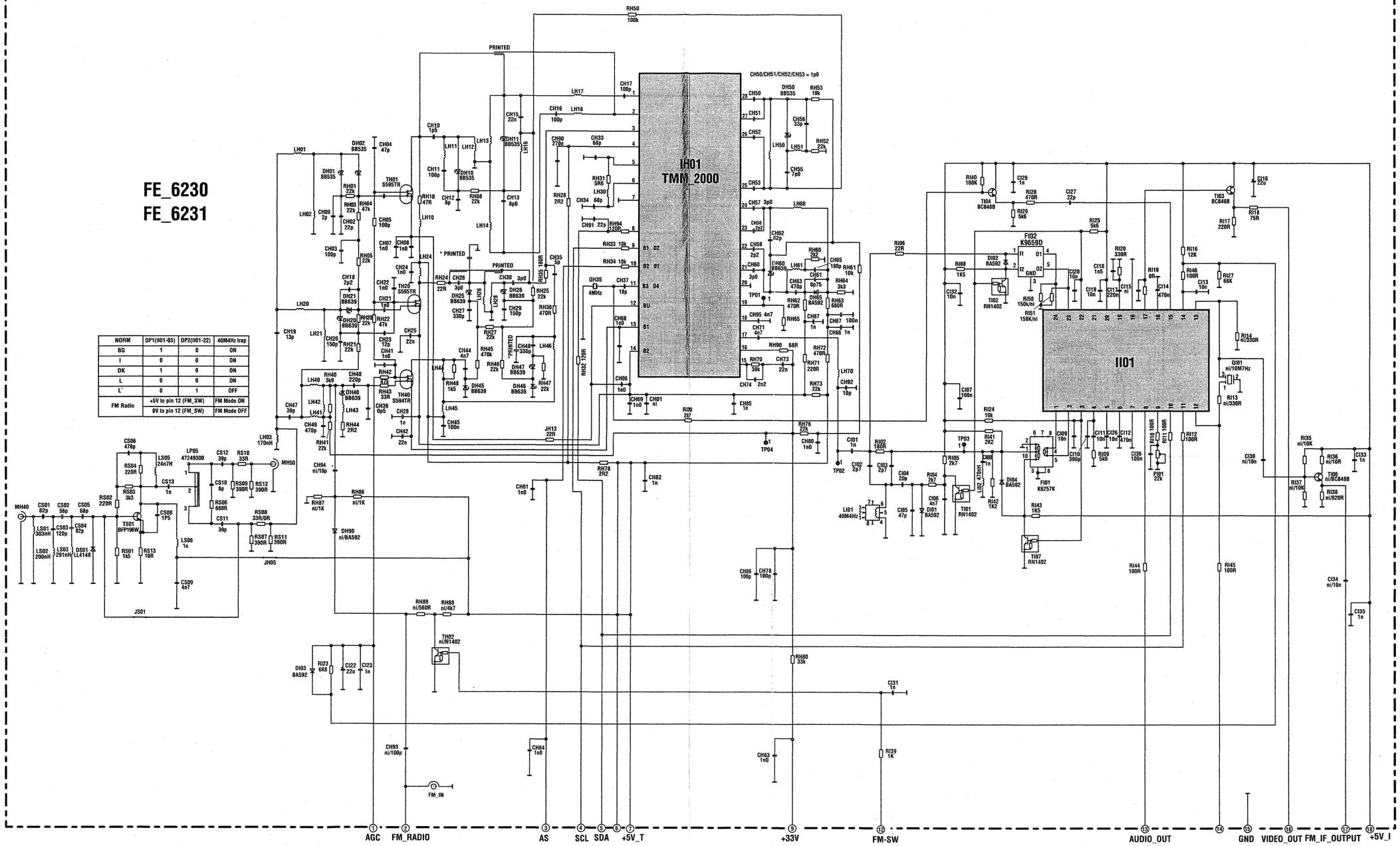


DYNAMIC FOCUS MODULE - MODULE FOCUS DYNAMIQUE - DYNAMIKFOKUS BAUSTEIN - MODULO FUOCO DINAMICO - MÓDULO FOCO DINÁMICO



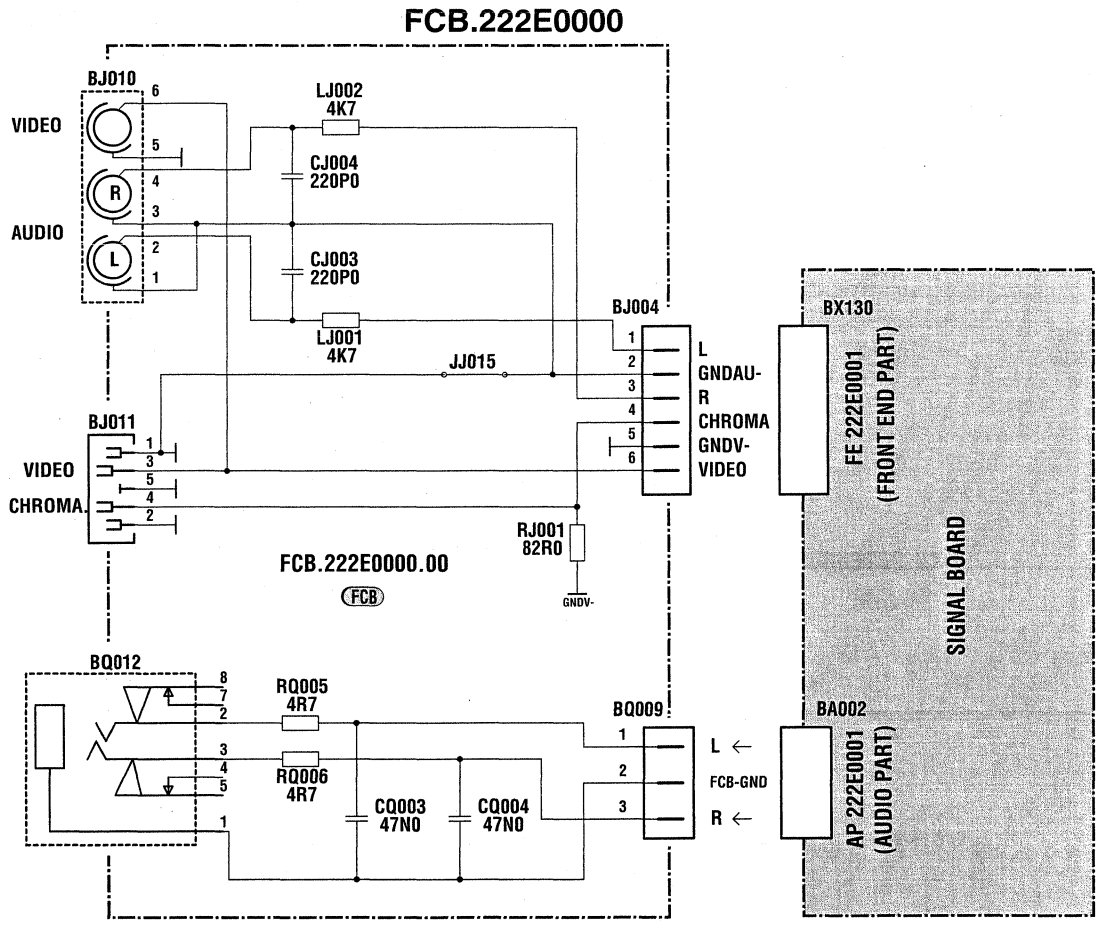
FE_6230
FE_6231

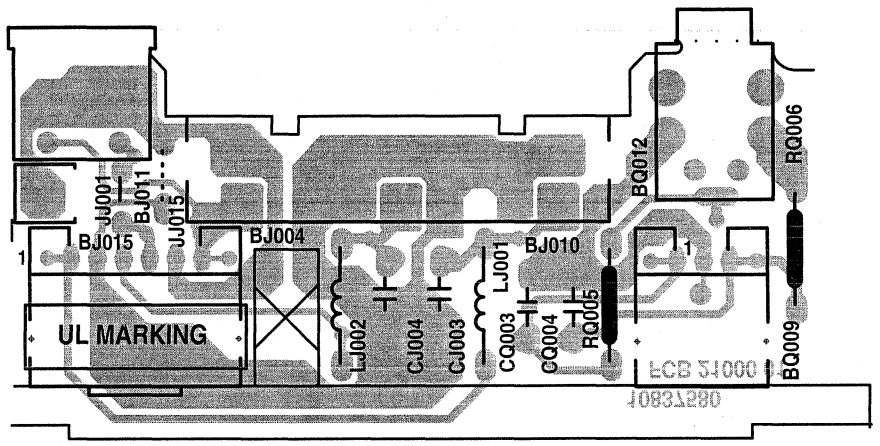
NORM	OP1(II01-03)	OP2(II01-22)	40M4Hz trap
BG	1	0	ON
I	0	0	ON
DK	1	0	ON
L	0	0	ON
L'	0	1	OFF
FM Radio	+5V to pin 12 (FM_SW)		FM Mode ON
	0V to pin 12 (FM_SW)		FM Mode OFF

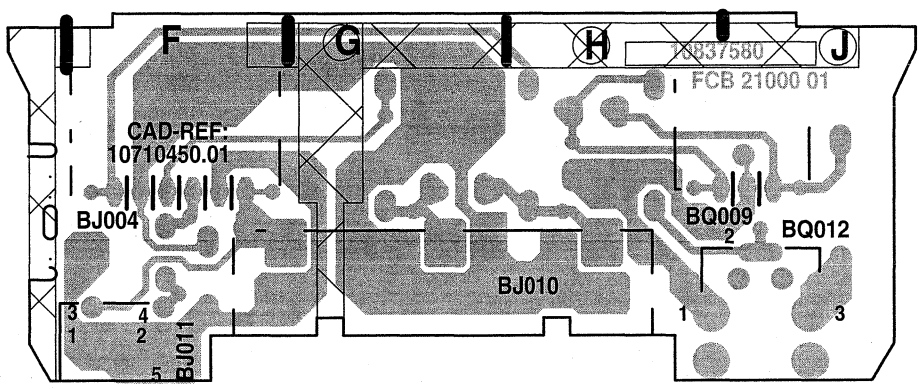


FRONT CONNECTOR BOARD - PRISES EN FACADE ET INTERCONNEXION DU CLAVIER -FRONT ANSCHLUSSPLATTE - PIASTRA CONNESSIONE FRONTALE - PLÁTINA MANDOS FRONTAL

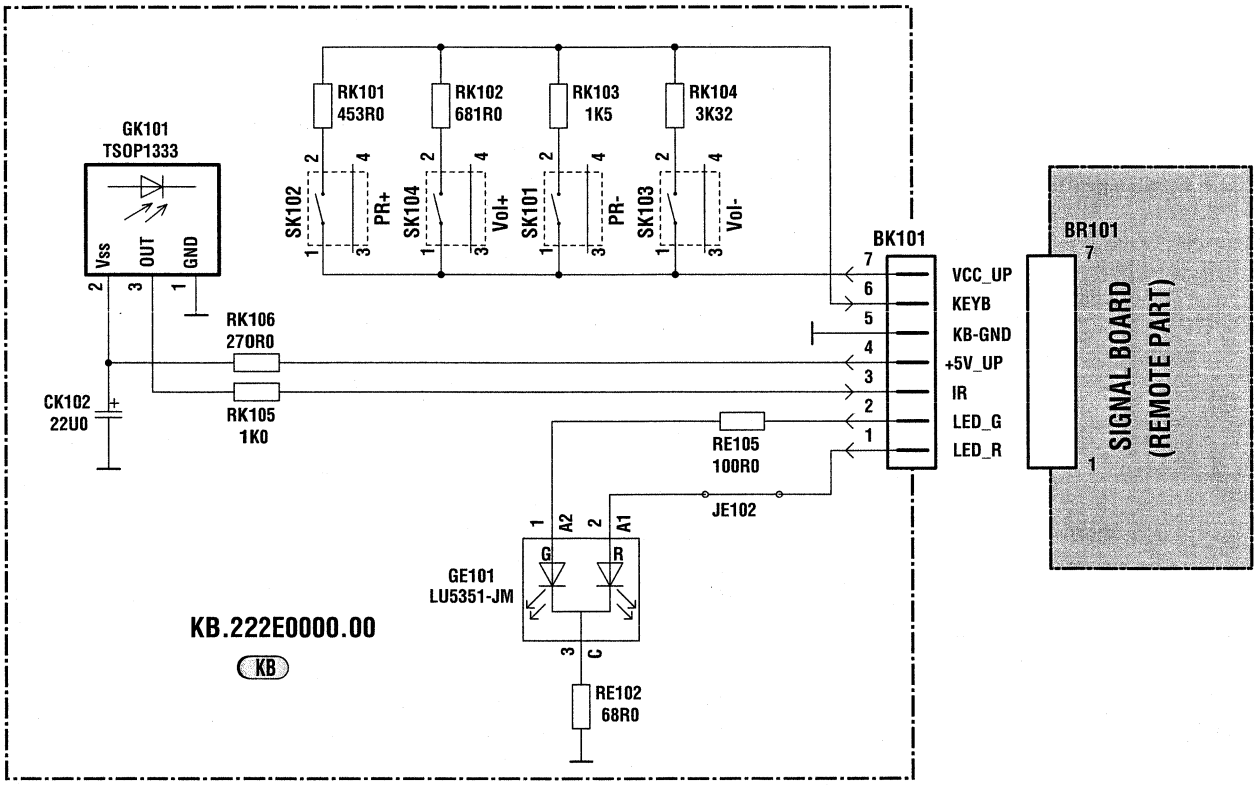
FCB.222E0000

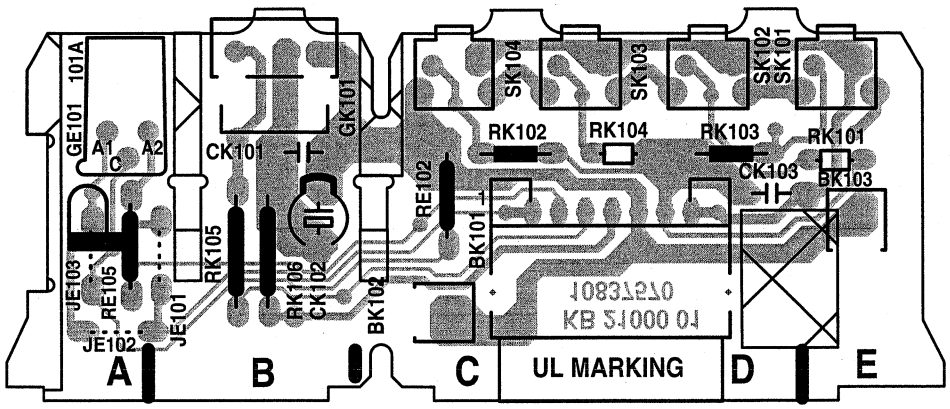


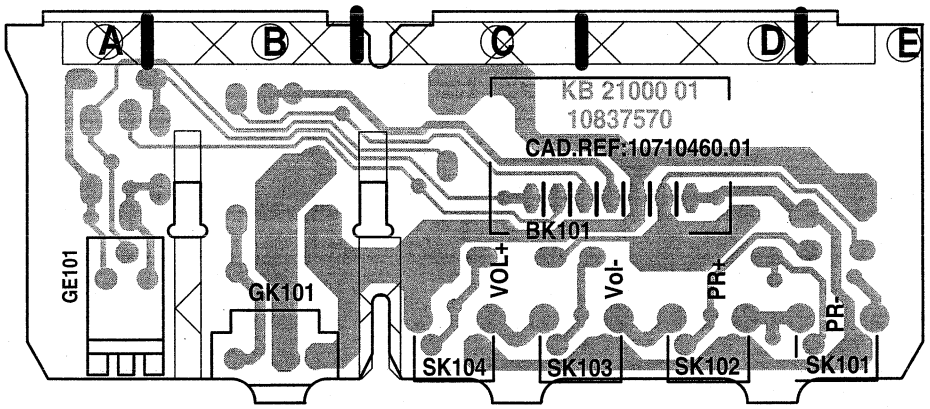




KB.222E0000.00 - KEYBOARD 4 Key







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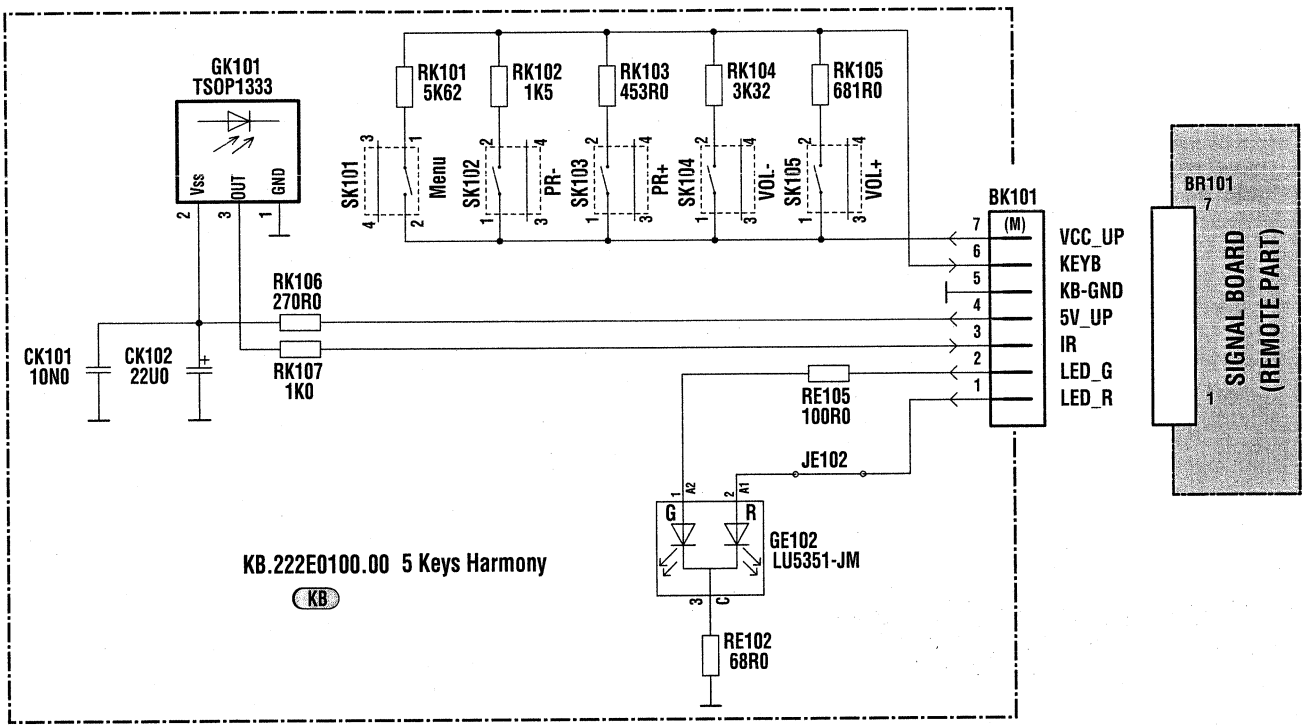
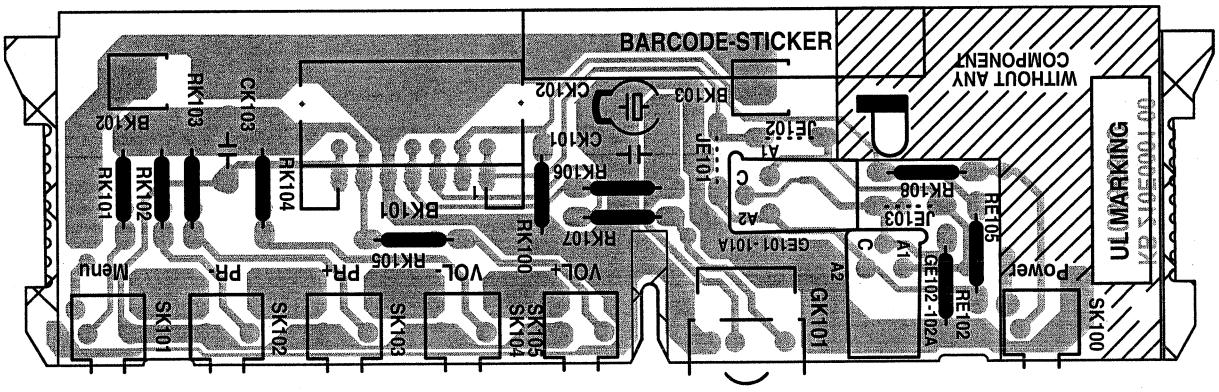
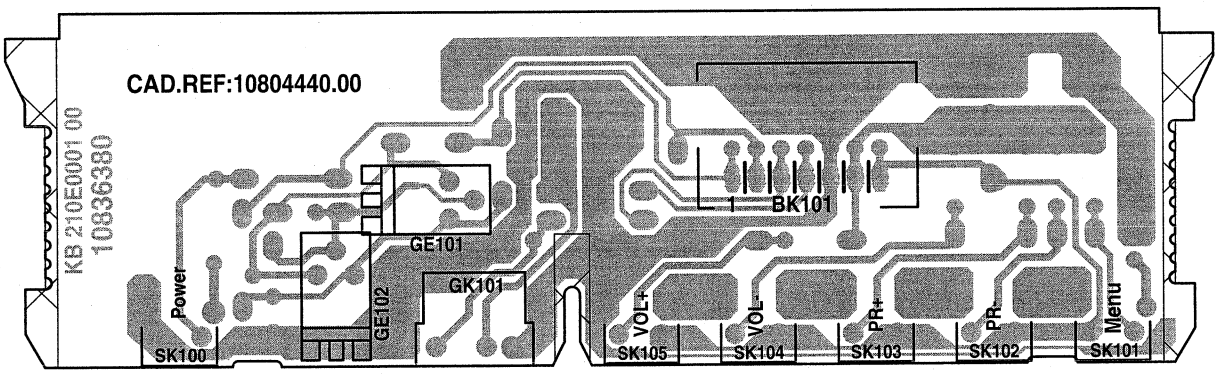
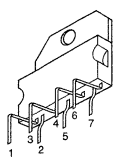






INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE - CIRCUITS INTEGRES ET TRANSISTORS INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN - CIRCUITI INTEGRATI TRANSISTOR - CIRCUITOS INTEGRADOS Y TRANSISTORES



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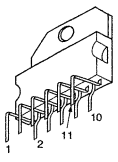

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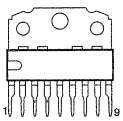

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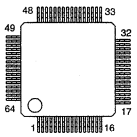

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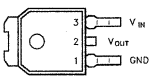

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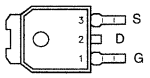

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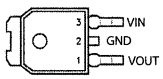

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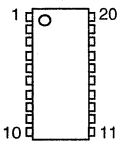

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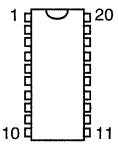

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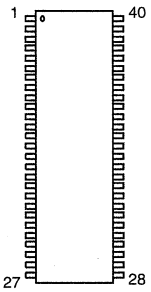

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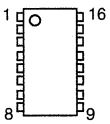

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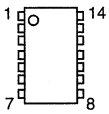

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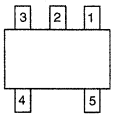

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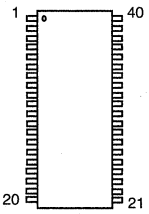

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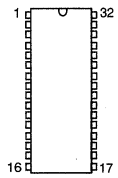

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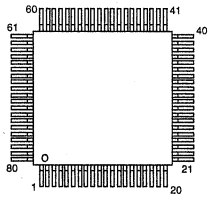

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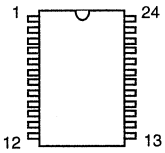

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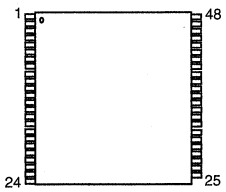

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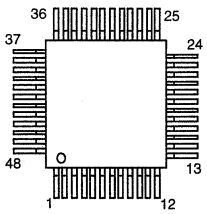

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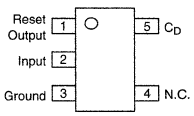

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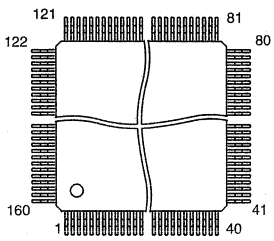

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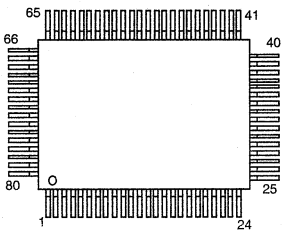

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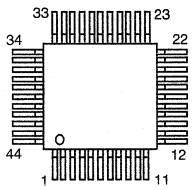

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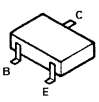

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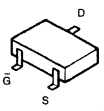

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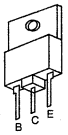

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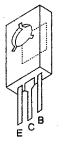

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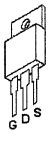

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LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS - ABKÜRZUNGEN
LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES

- **AQR_ON** DISABLE AQUISITION MODE REGUL. ENABLE PWM PULSE
- **AUDIO_MUTE** MUTES AUDIO AMPLFIERS
- **AV1_8** PIN_8 DETECTOR
- **AV_LINK** AV_LINK DATAS VCR/TV
- **AV_R_ OUT** AUDIO RIGHT-OUT
- **AV_L_ OUT** AUDIO LEFT-OUT
- **AV_R_ IN** AUDIO RIGHT-IN
- **AV_L_ IN** AUDIO LEFT-IN
- **AV_B** BLUE SIGNAL FROM AV
- **AV_G** GREEN SIGNAL FROM AV
- **AV_R** RED SIGNAL FROM AV
- **AV_C_ IN** CHROMA-IN
- **AV_FB** FAST BLANK SIGNAL FROM AV SCART
- **AV_Y_ IN** VIDEO-IN
- **BEAM_INFO** BEAM CURRENT INFORMATION
- **BLKCURR** CUT OFF CURRENT
- **B_TXT** BLUE SIGNAL OUTPUT (TEXT)
- **B_OUT** BLUE SIGNAL TO VIDEO AMPLIFIER
- **BREATHING** COMPENSATE BREATHING PICTURE SIGNAL
- **BSVM** BEAM SCAN VELOCITY MODULATION
- **CMP** COMPONENT INPUT SIGNALS
- **CNT1_20V** SAFETY SIGNAL TO INSURE A GOOD CONNECTION BETWEEN SIGNAL BOARD AND POWER BOARD (BV001- BL111)
- **CNT2_20V** SAFETY SIGNAL TO INSURE A GOOD CONNECTION BETWEEN SIGNAL BOARD AND POWER BOARD (BP500- BP005)
- **CRT** CATHODE RAY TUBE
- **CVBS** VIDEO
- **CVBS_TXT** TEXT VIDEO
- **DEFMOD** MODULATION VOLTAGE GENERATED ON DFB MODULE
- **DEGAUSS** DEGAUSS SIGNAL
- **DPC** DYNAMIC PHASE COMPENSATION SIGNAL
- **EFC** EARTH FIELD CORRECTION
- **EHT** EXTREMELY HIGH TENSION
- **EHT INFO** HORIZONTAL DEFLECTION PROTECTION
- **E.W_DRIVE** EAST - WEST DRIVE SIGNAL
- **EW_PROT** SAFETY SIGNAL FROM DIODE MODULATOR
- **FB DETEC** FAST BLANKING DETECT
- **FB_TXT** FAST BLANKING (TEXT)
- **FW ADJ.** FULL WHITE ADJUSTMENT
- **G_OUT** GREEN SIGNAL TO VIDEO AMPLIFIER
- **G_TXT** GREEN SIGNAL OUTPUT (TEXT)
- **H_DRIVE** DRIVE SIGNAL FOR HORIZONTAL DEFLECTION
- **HEATER** HEATER OUTPUT FROM THE DST TO CRT
- **IIC-CL-1** I2C CLOCK BUS 1
- **IIC-CL-2** I2C CLOCK BUS 2
- **INF_POW_FAIL** POWER FAIL INFORMATION
- **IR** INFRARED RECEIVER
- **LED** LED DISPLAY
- **M_RES#** MAIN RESET SIGNAL
- **NMI** NON MASKABLE INTERRUPT
- **PHI2_REF** PHI2 REFERENCE SIGNAL
- **PKS** PEAK SENSING
- **PO** POWER ON
- **PWM** PULSE WIDTH MODULATION
- **RESET** RESET TO MICROPROCESSOR
- **RF_CVBS** DEMODULATED TERRESTRIAL TUNER SIGNAL
- **ROTATION** OUTPUT OF EARTH FIELD CORRECTION STAGE
- **R_OUT** RED SIGNAL TO VIDEO AMPLIFIER
- **R_TXT** RED SIGNAL OUTPUT (TEXT)
- **SIF** SOUND IF OUTPUT
- **SSC_V_GUARD** SAFETY DATA GENERATED BY THE VERTICAL AMPLIFIER TDA8177F
- **TUBE DETECTION** INFORMATION FOR TUBE FORMAT
- **+USYS** SYSTEM VOLTAGE
- **+/- UA** SOUND VOLTAGE
- **+UVERT** POSITIVE SUPPLY VERTICAL VOLTAGE
- **-UVERT** NEGATIVE SUPPLY VERTICAL VOLTAGE
- **+UVFB** POSITIVE SUPPLY VOLTAGE FOR VERTICAL POWER STAGE
- **+UVIDEO** VIDEO VOLTAGE FOR THE CRT BOARD
- **U_OUT** U TO VIDEO PART
- **V_OUT** V TO VIDEO PART
- **Y_OUT** Y TO VIDEO PART
- **+UVFB** POSITIVE SUPPLY VOLTAGE FOR VERTICAL POWER STAGE
- **1V8_UC** SUPPLIES 1V81H / 1V82H POWER SUPPLY UP CONVERTER PART OF SIGNAL BOARD
- **3V3_UC** 3V3 POWER SUPLY UP CONVERTER PART OF SIGNAL BOARD
- **5 V_A / 5V_V** 5V POWER SUPPLY SIGNAL BOARD
- **5V_STBYL / 5V_RP** MICROPROCESSOR SUPPLY VOLTAGE
- **5V_STBY** 5V STANDBY
- **6 V** SUPPLIES THE 5V REGULATION AND 3V3 AND 1V8 REGULATORS ON THE SIGNAL BOARD.
- **10 V** SUPPLIES THE 8V_V REGULATORS ON SIGNAL BOARD
- **8 V** 8V SUPPLY SIGNAL BOARD
- **7V_STBY** 7V STANDBY
- **33V** SUPPLY VOLTAGE TUNER
- **20V** SUPPLY VOLTAGE HORIZONTAL DRIVER AND BSVM CRT

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